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THE SOCIAL FUNCTIONS OF SYMBOLS.

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CONTEMPORARY psychological discussion contains a great many references to symbols. It is perhaps natural that these should be mainly concerned with the parts which the symbol may play in the mental life of the individual, and further that, whether they deal with the individual life, or with the influence of symbols upon social activities, they should be largely preoccupied with problems of interpretation. When we have learned what a symbol stands for, however, even more important questions concerning what it actually does, both within the personality and within the group, remain to be considered. I propose to discuss certain of these in the present paper. And since it is obvious that nearly all social products—fashions, folk tales, customs of all kinds, institutions and traditions—are apt to contain much symbolism, I shall deal with my problems solely as they affect social psychology.

First some characterisation of the psychological nature of the symbol is necessary. Symbols must be distinguished from mere signs. Anything that stands for something else is a sign, but a symbol must possess at one and the same time a double or a multiple significance.* Further, the whole of this double or multiple significance must be effective, when the symbol is used, even though part of it is in no way being thrust upon the attention. Thus all symbols possess both a "face" and a "hidden" value, and it is one of the great achievements of psychology to have shown how the "hidden" value is generally, from the point of view of function, the more important. A flag, for example, is a very common symbol. Whenever we see a flag we see it in a particular perceptual setting, and this contributes a part of its face significance or value, the rest coming from other circumstances of the moment, and from a more or less vaguely realised relationship between the coloured bunting that we see and certain ideas concerning group ascendancy or peculiar group functions. But if the flag really does operate as a symbol, behind this face value lie a mass of undifferentiated feelings and impulses which do not rise into consciousness, which we could not adequately put into words even if we wanted to, which represent the influence of much earlier experience, and perhaps the operation of tendencies not arising from individual experience at all, and which, though they go unattended to, powerfully influence our behaviour.

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* Cf. E. Jones: *The Theory of Symbolism,* Brit. Journ. of Psychol, Vol. 9, pp. 181-229.

In the second place it is important to notice that the hidden values of symbols constantly tend to become less and less capable of exact definition. There is a natural history of symbols. Its starting-point is when certain material of cognition appeals at one and the same moment to more than one reaction tendency. When I was a boy I knew a field, all humps and hollows with little level stretches, where our best games could be played. Thither we often went, my playfellows and I. But as often as we went there we were trespassing, and well we knew it, and many a time did we make a violent and fearful exit, pursued by angry shouts and a cracking whip. So the field, its green grass, its hills and its hollows, appealing at once to the play tendencies, the fear impulses, and the desire for adventure, quickly became a symbol, and often intruded itself into my dreams. Generally it came as a fine and happy place, a place for games, but immediately behind there was fear, and the picture of a man's face that held me in terror. Then as time went by the fear of the face began to be built together with the fear of other threatening things. When, after the common allusive fashion of boys, we shouted one to another "Hilly Park!" nobody could quite tell what the hidden significance would be, but only that it must have something to do with the sentiment of the forbidden thing.

When the symbol first arises its whole significance, the hidden as well as the face meaning, can be put into definite pictures, for it is drawn immediately from particular events of personal experience. But as time goes on, if the symbol still persists, its face value or its hidden value (or both) always tends to get more abstract. The exact nature of the psychological process according to which this takes place deserves much more study than it has been given. A very great part of it is due, however, to the organisation of images by the growth of sentiments and ideals. The symbol now does more than evoke a particular concrete image and its significance: it stirs up some sentiment, and the manifold significance of a sentiment, though it is very apt to make use of images for its expression, yet can never be wholly expressed in terms of any particular representation. There is no important, or persistent, social symbol which has not struck the roots of its hidden significance deep into some common sentiment or other.*

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* Cf. my *Symbolism in Folk Lore*: Proceedings of the VIIth International Congress of Psychology. Cambridge, 1924. p. 284.

Much more might be said about the psychological character of symbols, but it is these two things: their double or multiple significance, and their close relation to the development of sentiments that give to them some of their most important social functions. We may, therefore, at once go on to consider these functions.

Much has been written about the transmission of culture, or of cultural features, from one social group to another, through contact. But generally the interest which has prompted this study has been ethnological rather than sociological or psychological. Thus much evidence has been accumulated with regard to the facts of contact, and many fascinating speculations have been advanced with respect to the migrations of groups. At the same time the actual mechanisms by which transmissions are effected have, strangely enough, received far less attention. Sometimes it even seems to be assumed that all we need to establish is that certain groups did actually come into contact. Their common cultural characteristics are then immediately said to have passed over from one group to the other. This, however, certainly does not follow, for not all cultural possessions can be equally easily transmitted. And when we consider the mechanisms by which social possessions are passed on from group to group, we can readily see that perhaps the most important method of all is by the establishment of symbols.

This is in fact one of the main social consequences of the dual or multiple significance of symbols. Suppose—though the facts of of any actual case are far more complex than can well be set forth—we have two groups which enter into relationship, one of which may be called the culture-bringing group, and the other the culture-receiving group. The results of their interplay are fundamentally determined by the social relationship which ensues. There are three very important cases. First the culture-bringing group may be manifestly superior to the other one, either by virtue of its material possessions or in consequence of its higher social development. Or again the culture-receiving group may, despite its acceptance of new customs and conventions, still maintain a position of considerable superiority. Or again the two groups may be wholly friendly and may give and take without superiority or inferiority. In any one of these cases certain material of the culture-bringing group is almost sure to be selected by the culture-receiving group and adopted by the latter, not simply for its own value, or because of its obvious significance, but as standing for *all* the desirable elements possessed by the culture-bringing group. Or it may be that the material is selected not because it vaguely indicates what is desirable in the culture-*bringing* group, but because, in a way which is never clearly expressed, it preserves what is desirable in the culture-*receiving* group.

Let us consider the first case. This is generally how elements of culture pass from the higher social groups, or from the governing groups of a community, to lower, or governed groups. We ourselves can see the whole process going on continually. A group of working men strike for higher wages. They insist, often with an honesty which it is impossible to doubt, that it is not really money they want. It is that, but it is more. And yet the more that is desired never is and cannot be very clearly defined, for it is not clearly realised, not yet articulated in the mental life of those by whom it is wanted. The few who can find words for the desire say that it is for leisure, holidays, music, books, education. But they have no definite notions, no clear pictures, of what sort of leisure, holidays, music, books, and education are wanted. Money is selected as a symbol for the whole culture which is desired. It, rather than anything else, is selected to be a symbol because money has a very obvious face significance, derived from the existing customs of the culture-receiving group. And the symbol owes its force to the fact that it can carry with it a mass of ill-defined ideas, feelings and wishes related to the whole culture of the superior group, and grounded in the sentiment of social emulation.

Just in the same way we see bicycles, motor-cars, pianos, fashions in dress, accents and many other cultural possessions, both material and psychical, pass swiftly from the centre to the periphery of a country, or even of an empire, or from a "higher" to a "lower" social level. They are selected because of an obvious face value, but their power of appeal lies in the fact that they have become symbols. It is what they somewhat obscurely stand for that gives them their strength. I have heard a Welshman most violently condemn a fellow-countryman who had acquired an important public position in England, simply because he had dropped his Welsh accent.

What holds true of the movements of culture in our own complex society in this respect holds true also of the past. We may lay it down as indisputable that hardly any important transmission of culture from group to group has ever taken place, save through the development of social symbols.

The first of the functions of the social symbol, then, is to facilitate the transmission of culture from group to group.

There is a special case of transmission which has a peculiar importance since it shows clearly another of the social functions of the symbol. Not infrequently the culture-receiving group, though it assimilates from without some new possession, nevertheless contrives in doing so to maintain its own superiority. The hidden value of the social symbol may, in fact, relate either to the half appreciated meaning which the symbol has within the culture-bringing group, or to the past history of the group which is receptive. The latter seems very often to be the case with the religious symbol. Years after the Spaniards had conquered New Granada, for instance, when the native Indians were all accounted Christian, and had taken over the religious paraphernalia of their conquerors, secret Indian shrines were sometimes found. In one of these was discovered, offered to the "overthrown" idols, the cap of a Franciscan friar, a rosary, a priest's biretta, and a Spanish book of religious precepts.* The new material had been assimilated, but its predominant, though hidden significance preserved the past. When any well-established corporation, being subjected to outside influence, is made to revise its constitution, exactly the same thing can be noticed. The new forms are accepted. But they are constantly given some slight twist, either of actual phrasing, or of interpretation, which unobtrusively preserves their continuity with the old. Just the same use of symbolism can often be detected in the work of cartoonists who have a strong political bias. The present leader of a party is, in their drawings, given some small turn of countenance or of dress which links him up with a famous leader of the past. Or for that matter the rallying cries of a political party themselves gives us good illustrations. They are meant to meet an ever changing situation, but the bent of their phrasing and the colour of their significance come invariably from past party triumphs. All secret societies which have ever been formed for the purpose of holding tenaciously to an outworn or violently suppressed custom or culture have speedily developed a flourishing and elaborate symbolism.

This is the second great function of the social symbol: to facilitate the preservation of groups. In all social regressions symbols are apt to play a very great part.

Not only does the symbol act powerfully in preserving a group or a group's traditions when perhaps a first glance at society would suggest that they have disappeared, but it also does much at all times to preserve social harmony within an obviously living and active group. This is directly due to the pictorial origin of the symbol. An interpretation embodied in a symbol is a very much easier thing to grasp than an interpretation or a meaning which is not sustained by a symbol; just as imaging is a more primitive psychological reaction than judging or conceiving. Uniforms, for example, badges of various kinds, flags and pennants keep *esprit de corps* and patriotism alive far more effectually than the mere concepts of loyalty and good faith to one's comrades and country can ever do, at least within any stage of social development that has as yet been attained.

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* R. B. Cunningham Grahame: *The Conquest of New Granada*: 1922. Footnote p. 97.

We touch here upon an extraordinarily important psychological principle the operation of which may be seen in conduct of all kinds. Appropriate and significant reactions are made long before the distinctions on which they are based appear in consciousness. A young child reacts consistently to differences between colours some time before such differences are a part of what he can be said to know. The influence of the symbol in promoting public order and harmony is a striking illustration of this. The symbol in fact produces the result which reflective analysis *might* produce, but without any help from reflective analysis. This is a part of the reason why every new public movement—which necessarily, if it is to be maintained, demands the formation of a group—is almost sure to develop symbols of a very concrete kind. Generally some peculiarity of a leader is adopted as symbolic in the first place. Thus the early Quaker, whom Barclay's rationalistic statements would have left cold, or to whom they would have been unintelligible, was fiercely thrilled by the practice of keeping his hat on in the presence of great men. What Barclay later put into propositions and principles was after all very much the same as what his less deliberative forerunner unthinkingly responded to when he kept his hat on. So with Demosthenes' lisp and Alexander's limp; so with Gladstone's collar and Chamberlain's eye-glass: they all strongly maintain the harmony of groups because they appear to make concrete the unformulated principles which hold the group together.*

Even when the social symbol does not replace interpretation but prompts it, the fact that the symbol appears to be the same for all blurs over differences of interpretation, and so again promotes social harmony. This is one of the reasons why the symbol is peculiarly tenacious of life in the religious group. A variety and independence of interpretation which would be socially disruptive were it not for the presence of symbols can by these be rendered comparatively harmless, the obvious unity of the group in regard to its symbols being stronger than the less obvious, though not less real diversity of view of the persons by whom the group is constituted.

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* An excellent illustration of this occurs in E. M. Forster's recent book, *A Passage to India* (London, 1924) p. 24. A number of Anglo-Indians are assembled in a club when an amateur orchestra begins to play the National Anthem. "Conversation and billiards stopped, faces stiffened. It was the Anthem of the Army of Occupation. It reminded every member of the club that he or she was British and in exile. It produced a little sentiment and a useful accession of will-power. The meagre tune, the curt series of demands on Jehovah, fused into a prayer unknown in England, and though they perceived neither Royalty nor Deity they did perceive something, they were strengthened to resist another day. Then they poured out, offering one another drinks."

The third great social function of the symbol is, then, to promote the harmony of the group.

But in this respect the symbol is like a great many other conditions of human conduct: it appears to produce opposite effects upon different occasions, and very frequently leads to sharply contrasted behaviour on the part of different groups. Symbols maintain harmony within the group; it is equally true and important that they constantly promote discord between groups. For just as the symbol may blur over differences of interpretation, so a difference of symbols may obscure likenesses of ultimate meaning and aim. In each of these cases it is the symbol itself that takes the lead, and, in a manner, operates directly in determining social conduct. Consequently all the bitterest social struggles tend to centre about symbols, and the more the groups concerned are dealing with the same kind of problem the more furiously will they fight about differences of symbols. Just because the group *is* consolidated by the help of the symbol, so, if the symbol is attacked, does the group defend itself with great vigour. Precisely because the symbol *does* help powerfully to organise and harmonise a group, so is it very apt to attract the hatred and jealousy of other groups.

Examples abound in almost all of the important public controversies of all times. Thus it is impossible to open any volume of sermons delivered in England about the beginning of the seventeenth century without finding illustrations of the power of the symbol to foment and centralise social discords. And as everybody knows this effect of the symbol was shown not in words only, but in many extremely violent deeds. In 1643, for instance, "the Earl of Manchester, who was then in command of the Parliamentary party at Cambridge, commissioned one William Dowsing to carry out the ordinance of Parliament directing the abolition of altars, communion tables, rails, and the defacing of all images, crucifixions and superstitious inscriptions."* Dowsing kept a journal in which he recorded his doings with great precision and obvious relish. "At St. Peter's Parish, December 30, 1643," he writes, "We brake down 10 Popish Pictures, we tooke of 3 Popish Inscriptions of Prayers to be made for 3 Soules, & burnt the rayles, digged up the steps & they are to be levelled by Wednesday." And again: "At Little St. Mary's, December 29, 30, 1643. We brake down 60 superstitious Pictures, some Popes and Crucifixions, & God the Father sitting in a charger and holding a Glasse in his hand."†

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* Atkinson and Clarke: *Cambridge described and illustrated,* London, 1897: p. 123.

† Quoted by Atkinson and Clarke, l.c.

This rage against symbols on the part of the reforming party at that time was however paralleled by an equal fury of the ritualising group against the Protestant rejection of Romish symbols. Emmanuel College, Cambridge, for example, had a chapel the chancel of which stood towards the north, while the kitchen stretched eastwards. This chapel had never been consecrated, and surplices and the keeping of fast days were constantly ignored. Only seven years before Dowsing began his destructive work, a vigorous letter of protest was written to Archbishop Laud concerning Emmanuel College practices: "But in Emmanuel College they receive that Holy Sacrament sitting upon Forms about the Communion Table, and doe pull the Loafe one from the other, after the Minister hath begon. And so y^e Cuppe, one drinking it as it were to another, like good Fellows, without any particular application of y^e s^d words, more than once for all."*

It is because of the power of the symbol to excite social antagonisms that popular leaders of the revolutionary kind frequently avail themselves of the traditional symbolism of the group which they aspire to lead. Many interesting illustrations of this have occurred in the course of the anti-British propaganda in India. Bal Gangadhar Tilak, well-known as a vigorous and accomplished opponent of foreign rule, found it desirable, for instance, to call to his aid the powerful influence of religious symbols. He placed his movement "under the special patronage of the most popular deity in India."

"Though Ganesh, the elephant-headed god, is the god of learning whom Hindu writers delight to invoke on the title-page of their books, there is scarcely a village or a frequented roadside in India that does not show some rude presentment of his familiar features, usually smeared over with red ochre. Tilak could not have devised a more popular move then when he set himself to organise annual festivals in honour of Ganesh, known as Ganpati celebrations, and to found in all the chief centres of the Deccan Ganpati societies each with its *mala* or choir recruited among his youthful bands of gymnasts. These festivals gave occasion for theatrical performances and religious songs in which the legends of Hindu mythology were skilfully exploited to stir up the hatred of the foreigner . . ."†

Thus both directly—as when an alien symbol is itself furiously attacked—and indirectly,—as when a native symbol is especially exalted—the symbol excites and centralises social discord.

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* Atkinson and Clarke: *op. cit.* p. 460.

† Valentine Chirol: *Indian Unrest,* London, 1910, p. 44. A reference to the plays performed, one of which is summarised on pp. 337-9 of Mr. Chirol's book, will show clearly the important place accorded by them to symbols.

When we consider how the symbol both arouses devotion and excites antagonism, we can see clearly its function in keeping alive the emotional basis of social organisation. As I have said, every long-standing and powerful social symbol is grounded in sentiment. And sentiments, according to the now commonly accepted psychological usage, are born through the coming together into a single organisation of a variety of emotions.

Now nearly every writer upon social psychology has pointed out the power of the group to heighten emotions. But, save in rather exceptional circumstances, when the group tends to become a crowd, a mob or a herd, social emotions are never unchecked. All the strongest sentiments—love, hate, patriotism, loyalty and so on—and most of the greatest ideals grow up around personal relationships, and normally when social emotions are experienced these sentiments and ideals are at the same time stirred into activity. Hence socially expressed emotions, except under unusual circumstances, are apt to have their own peculiar flavour, and to be checked and regulated by the systems into which they enter. But the moment an emotion enters into an organisation with other emotions it acquires a new and characteristic emotional quality. The emotions which in organisation form a sentiment are more than merely organised emotions: they possess an affective character within the sentiment which they do not possess outside of it. This difference of affective character probably cannot adequately be expressed in language. It is something more than a diminution of violence and an increase of refinement. But it certainly does frequently involve both of these.

We very often tend to say that no emotions are so violent and so lacking in delicacy as those which characterise social behaviour. This is simply untrue. If we take the rage of the mob, the panic of the demoralised fighting group, the lust of the victors after a struggle we seem to have striking cases in point, and no doubt there are many others. But these are not situations characteristic of a highly developed society, and ought not to be taken as the types. In fact the gradual organisation of emotions into sentiments, and of emotions, sentiments and ideas into ideals tends to remove the explosiveness of the primitive affective response out of the daily run of life. The sentiment, the ideal have modes of conduct ready for any of a number of situations, whereas the emotion is far more specialised in its operation. Thus as social organisation becomes wider, and its influence permeates every side of life, the determination of human conduct becomes more and more abstract.

Such a development has its own dangers, and may leave a group helpless in the face of some sudden and special demand. But the social symbol acts powerfully in preventing the tendency to be determined by abstract ideals from proceeding to dangerous lengths, and does much to preserve the capacity of a group to act swiftly, decisively and unanimously. For the symbol keeps the sentiments and ideals which are the basis of group organisation in touch with the concrete. It provides a specific picture for a general meaning. Thus it has a two-fold manner of operation. By virtue of the symbol a group can upon occasion relapse into a primitive explosive, single emotion determined type of conduct and still not cease to be a group. And by virtue of the symbol the sentiments and ideals which motivate a group's ordinary behaviour, *relatively* abstract though they may be, yet retain a concrete character and remain in touch with actual life.

"The Spaniards," says Miss Hope Mirrlees, "deal in a very cavalier way with symbolism: . . . they put together from the markets and streets and balconies of Andalusia a very human type of female loveliness; next they express this type with uncompromising realism in painted wooden figures which they set up in churches saying, 'This is not Pepe, or Ana, or Carmen. Oh no! It isn't a woman at all: it's a mysterious abstract doctrine of the Church called the Immaculate Conception.' Then they all proceed to fall physically in love with the abstract doctrine—serenading it with lyrics, organising pageants in its honour, running their swords through those who deny its truth, storming the Vatican for its acceptance."*

This is not, however, only a Spanish way of dealing with symbols. With differences for social setting and history the same kind of thing could be written of any symbol using group anywhere.

Here, then, are four important social functions which are possessed by symbols. They all spring directly from those two outstanding psychological characteristics of the symbol that were considered at the beginning of this paper: from the basis of symbolism in some concrete event or situation of which it is a picture, and from the duality or multiplicity of signification which gives to symbols their enduring influence, and renders them at once apparently definite and clear, and yet abstract to a considerable degree. For the symbol is tied on the one hand to the concrete and particular image, and on the other to the more general sentiment and ideal.

There are no doubt many other ways in which symbols influence the nature and development of social organisation and the growth of culture. These four, however, all alike affect the social character of the group considered as a whole. We have seen how the symbol:

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* *The Counterplot.* 1924: pp. 5-6.

(a) acts as a medium for the transmission of culture;
(b) secures the preservation of the group;
(c) promotes social harmony, and social discord;
(d) prevents those social sentiments and ideals which are at the basis of organised group life from becoming vague and lifeless abstractions.

It is no wonder that there is hardly any social structure, hardly any department of social activity which does not contain abundant traces of the symbolic element.

NOTES BY THE WAY.

No. 1.

Fact and Value.

Although in a sense the whole world lies open both to science and to metaphysics, their functions are none the less distinct in kind, and that of metaphysics is still the more inclusive. For whereas science is restricted to the attitude of pure cognition, metaphysics must include cognition in appreciation. Existence ("thing-hood," factual nature,") is only one fundamental aspect or ultimate feature of reality. There is also value as such, equally fundamental and ultimate, and not to be expressed in terms of mere existence at all. Now it would be ludicrous to contend that science cannot take cognisance of value at all. No thing and no fact in the world, even the inmost facts of personal experience can any longer be "contracted out" of scientific enquiries. What is true is that science cannot take cognisance of ultimate values as such. Let us take the three positive values generally claimed as ultimate or absolute,—moral goodness, beauty, rationality. Science can and must treat of the origin and history of our ideas of these values; it must write histories of ethics, aesthetics, and logic. It must also point out that certain ways of regarding and handling these ideas lead to certain results, and in that case it may assign a certain instrumental value to various doctrines in morals, art, and philosophy. But it is always dealing with the ultimate values not as such or as they are in themselves, but only so far as they are actually existing ideas in existing minds. It is of the existence of values that science treats, not of the ultimate value of existences. And goodness, beauty, and rationality as such are what determine the ultimate value of existences; they are not themselves existences, though they may be ultimate realities; nor are they merely *de facto* laws of existence like Dr. Alexander's universals. They are ideals, not ideas. They can only be properly known by an attitude of appreciation or valuation, which accepts the positive and rejects the negative value. Therefore science in its strict impartiality cannot deal with them. The man of science is the only Adam who can claim to remain in Eden, because for him alone the tree of the knowledge of good and evil still bears untasted fruit.

—Canon O. C. Quick, in the *Hibbert Journal.*

THE GOOD AS GOOD WILL

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THE title of this article immediately suggests the ethical doctrine of Kant. It is, however, no part of our purpose to enter upon a general defence or exposition of that doctrine. Our concern will be with that element in it which asserts that "there is nothing in the world, or even out of it, that can be called good without qualification, except a good will," and that this good will, like a jewel, shines by its own light, "as a thing which has its whole value in itself." It would seem quite possible to hold to the final sufficiency of this claim without endorsing all the other views with which Kant entwined it, and without adopting the particular psychology from whose standpoint he conceived the nature of will. In especial, we must disagree with the opposition which he set up between volition and desire, reason and inclination. No plea is put forward for the value of a will that wills nothing. What is claimed is, that a meaning can be put into the Kantian definition—a meaning in consonance with much present psychological opinion—whereby it should commend itself to us as the most satisfactory formulation of the ethical ideal. This meaning can be variously expressed: the only moral good is good character, or the virtuous disposition, or the total dedication of the self to particular right purposes, or the general set of the life towards goodness. The alleged intrinsic defects of this definition will be considered later; but first of all we must undertake a discussion of some terms and their meanings.

Moral good is often referred to as the chief or highest good, the summum bonum, but sometimes these latter terms and others kindred with them (such as "the complete good") are used as though to indicate good which is wider than moral good. This suggests that there is, on the one hand, good, and on the other hand, moral good, as things distinguishable. One ethical writer* defines the highest good as "a perfectly ordered Universe apprehended and chosen as such," where the emphasis is upon the first four words, and not upon the last five, for he distinguishes between complete and moral goodness: the former stands over against the latter as that which the morally good person chooses, and in the choice of which his moral goodness consists. The danger in such ways of thinking is that, for one thing, they confuse metaphysical and ethical problems, or else they confuse the meaning of the term good. Whether there is a perfectly ordered universe, and whether such a universe should be considered good, are questions for the metaphysician to settle, especially if he is wise enough to base his speculation upon ethical as well as other data, eschewing the position that ethical depends upon metaphysical doctrine. And in the case quoted there is a loose usage of the word "good." As attributed to the Universe, it means perfection of order or (perhaps) reality, or again, completeness, whereas in another connection it means perfection of moral quality. These two meanings are not obviously identical; and it is begging an important ethical question to equate "perfect universal order," or "the real," to "the good,"—since we are justified in holding to the normal ethical sense of the latter expression. This brings us to another danger in such a way of thinking, and one more to our present point. It is the danger of externalising the summum bonum. There is not absent a suggestion that the good is "there" and we are "here," and that *it* is to become a quality of *us* by our deliberately crossing over to it: or in other words that goodness is the inherent characteristic of it but not of us. One suspects that many discussions concerning the summum bonum are marked by this incipient externalising. It is so very natural, and like the tendency to reify in general, it shows the persistent presence of the plain man even in the philosopher. Perhaps it arises from his constant mental manipulation of the ideas of happiness, self-realization, etc., and from the spirit of detachment in which this is attempted. But whatever its source, the danger is both real and serious. It results in excessive stressing of the objectivity of the good, even when it is admitted that this is not its only characteristic. In particular, it seems to underlie a common objection to the notion of the good as good will—the objection, namely, that the notion is too subjective to be satisfactory. The criticism is to the effect that it confines good to the minds of persons, and restricts to each one's volition the effects of his good willing; whereas good is also objective, including such effects of willing as beauty, truth, order, and freedom. Viewed in this broad way, good is a public thing, going beyond the reinforcement of the agent's will or even the general enrichment of his life. In a word, good is objective as well as subjective, and its objective is superior to its subjective character; whereas to define it as good will is to make it exclusively or at least primarily subjective.

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* Mackenzie, Manual of Ethics, Book II., Chap VI., §4. (5th Ed.).

It is essential for clear thinking on this matter that we adhere resolutely to terms, and their meanings that are proper to Ethics. Especially must we avoid ambiguity in the conception of good. It does not seem too much to claim that in Ethical discussions this term should be taken in the sense of "goodness," and that if any other meaning is adopted, this should be made (and kept) clear from its primary and obvious signification. Sidgwick,* for example, asserts that the summum bonum is "composed of a moral and a non-moral element," which are subjective rightness of will, and non-moral good, respectively. "In my view," he says, "this subjective rightness of volition is not good in itself, but only as a means . . . to the production of other good effects"—i.e., non-moral good. It is pertinent to enquire: Of what value to Ethics is the notion of non-moral good? It is, on the face of it, and in Ethics, a self-contradictory expression, and this may become clearer if we use the equivalent expression—i.e., equivalent *for Ethics*—non-moral goodness. But there is a further enquiry: What is the Ethical validity of the procedure which judges moral good to be such by a non-moral (and therefore non-good) standard? I believe that no satisfactory answer can be given to these two questions, and for the reason already suggested, viz., that it is ethically futile to speak of non-moral good. Ethics, whose business it is to determine the summum bonum for persons, is concerned only with moral good, and this, as Sidgwick admits, is subjective rightness of volition. If there are other non-moral things of value, Ethics names them "good" only as they are means to moral good or goodness, and not conversely. Truth and freedom, for example, may have their own primary values, but they are *good* only in so far as they strengthen *in persons* the disposition towards goodness. With freedom this is especially obvious, but in principle it is clear in all cases, and so far the good is subjective.* The good for me, for anyone, is my, his, goodness at least, and this is true whatever interpretation may be given to the good. In other words, the good or goodness is primarily subjective on any view, and there is no special reason why the accusation of subjectivity should be brought against the particular view under consideration. Why then is it specially brought in this case? Doubtless because of the unethical duality of meaning that is forced upon the term "good" and the resultant implicit refusal to admit that its proper meaning is goodness of persons; and furthermore because of the mistaken anxiety to conserve its objectivity by ejecting it from essential relation to the willing of persons. Once recognize that there is only one (primary) ethical way of understanding the good, and the charge of subjectivity against our formula loses its point, not, however, because the good is not subjective, but because as moral it cannot primarily be otherwise.

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* Methods of Ethics, 4th Ed. Book III., Chap. XIV., § 2.

This preliminary discussion of terms has been necessary in order to remove a difficulty that would invalidate our whole task. The good cannot possibly be the good will if it has the wide extension sometimes given to it, that is, if it includes non-moral as well as moral good as co-ordinate species. We may be asked whether there are not unmoral goods, and our reply would be: viewed abstractly there are such goods, in abstraction, that is to say, from persons, whose essence (from the point of view of Ethics) is their volition. They are not "good" in their own right, but only as instruments of moral volition. As to a perfectly ordered Universe, it may be necessary to say that it is good (if at all) only as the expression of a Good Will that is adequate to it. However this may be, our view positively stated is this: the good as good will is an ethically legitimate formula, since the good is personal good or goodness; its direct reference is to personal character. Let each one ask himself: What is the summum bonum for me? and he will not be able to avoid the answer that it is a personal condition, a permeation of his self by goodness, his settled ways of choosing and striving. He will be convinced that it is to be within and not without him, and will repudiate the suggestion that it already exists apart from his own volition, or that his volition makes actual in his case—by a kind of transference of quality—what is already actual in its own right. For him there can be no good except as in fact or in prospect he voluntarily chooses it. Of course, the choice will not be capricious, but will be grounded in the nature of the man, as volition always is.

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* "Subjective," here, is not used in its ordinary sense, but to indicate that goodness is of persons intrinsically, rather than that it comes to be of them, as if originating from an external source. There is also, of course, a criticism of "the good as good will" on account of its supposed subjectivity in the ordinary sense.

There have been many other ways of conceiving the summum bonum, but from one point of view they are seen to be two: the essence of goodness is on the one hand *pursuit* of an end, on the other hand it is *attainment* of the end. The attainment idea is prominent in hedonism, especially in its extreme Cyrenaic form, according to which he is sufficiently good who is enjoying what the moment offers. In all hedonism, however, the morally desirable is described in terms of realized enjoyment. The same idea is stressed in a different way by thorough-going intuitionism, e.g., by the Moral Sense moralists. The ethical end is gained whenever reason or the moral faculty formulates its direct estimate. Pursuit is emphasised by those theories of the moral life that place its essence in development, so that man never is but always to be blest. We find this feature in thinkers otherwise very different. An Evolutionary ethicist such as Spencer, pronounces morality to consist in continuous adjustment (of internal relations to external relations), and Stephen describes it as constant endeavour (to maintain social health.) In these cases it is not so much the end as its promotion that is important, and if the end is conceived as realized, as by

Spencer, it turns out to be an unmoral condition. A thinker of a different school is Green, who nevertheless declares that the best life is the progressive realization of one's capacities as a spiritual (and social) being, but admits that this best life is so far from being attained that we cannot give any definite description of it; we may suspect ,however, that were it attained, it would be identity with the eternal extra—temporal consciousness which—or—whom—it is difficult to construe in ethical terms.

It may be objected that it is rare for any thinker to stress one of these conceptions, pursuit or attainment, to the exclusion of the other. This is so, and it is a fact that testifies to the necessity of including both in any ideal satisfactory to moral experience. At the same time it is usually the case that one is deliberately selected to the overshadowing of the other, to which little more than lip homage is paid. The intuitionists would rarely deny that moral living is urgent, but he thinks and speaks most of spontaneous valuation. The evolutionist emphasises the process of moral growth, of growing habituation to consider remote rather than proximate ends, until this becomes fixed and absolute, but he admits the relative moral value of stages in the process. And the validity of the current moral code as well as of the virtues of the Greeks is not denied by the advocate of ultimate self- realisation. In each case the attention of the reader is mainly kept to that aspect which the writer believes to represent essentially the moral ideal. It is quite a fair statement that there have been two ways of thinking of the summum bonum, viz., as pursuit or as attainment.

But to exhaust the highest good in either of these is to render it unsatisfactory to the reflective moral consciousness. In other words, personal goodness is more than the mere pursuit of an end or the simple enjoyment of achievement. It needs both, and if we abstractly emphasise one, this can be criticised from the point of view of the other. Let us see how the matter works out; and we shall begin with the notion of pursuit. Towards the end of Dennis' poem, the Sentimental Bloke gives as his new aim in life to see himself made better in his son. This seems an entirely admirable purpose, and is cherished by many fathers in the prose of ordinary life. But the Bloke would probably agree, were the suggestion made to him, that he would like his desire for his son reproduced in that person in regard to *his* son, and so on indefinitely—indeed that he should so train his son as to promote that desire, and that the son should do likewise when his turn came. The natural query is: when is finality to be reached? We seem to have a series of means but no end, whereas morality clearly needs end as well as means. What is to be the result of all the toil and care on the part of the successive fathers? Simply that there is to be no result save an unending preparation for an ever-receding consummation. But we are reminded that the Sentimental Bloke and others in similar case do find ethical satisfaction in their purpose, and believe it to be a worthy end. The reason must lie in their failure to fully analyze the matter, since common sense in moral concerns is no more thorough-going than elsewhere; it lies also in the belief that their purpose *is* gained in producing a worthy son, or that pursuit is complemented by attainment. When this belief is well founded it is a reasonable source of satisfaction, but it is hardly justifiable in any final manner in the type of case under consideration, unless the father's satisfaction is with his own attainment in the way of complete endeavour, rather than with his son's perfection as a product. But when satisfaction has this latter kind of basis, it shows that mere pursuit of an end is an insufficient good.

The whole literature of the Christian religion bears witness to man's revolt against this one-sided view of the moral life. That religion has much to say of the daily taking up of the cross and perpetual self-denial; its favourite analogies for moral experience are such as continuous warfare and the long footrace. The Christian is a pilgrim whose constant business is to progress. He has before him a personal Ideal or ideal Person whose perfection continually evokes the admission: "Not that I have already attained . . . but I press on" in "the upward calling of God in Christ Jesus." Hopefulness is prominent in his attitude—and yet he confidently expects the ultimate relinquishing of hope because of its fulfilment, when love (i.e., actual possession) of his Object shall be his sole concern. If there is a race, there is a goal and prize, and if there is a warfare and a cross, there is also a crown and a final victory. The Pilgrim's progress is long and hazardous, but he enters at length the Celestial City to have comfort for all his toil and to enjoy "the perpetual sight and vision of the Holy One," for there remaineth a rest for the people of God. The revolt against the prospect of an unending upward calling is expressed in the popular idea of "heaven" as connoting the absence of work and conflict. And this revolt is understandable, if the future is at first understood to involve ceaseless toil and strife and little more. Human nature cannot sustain unrelieved strain; in the midst of its warfare it looks for occasional signs of coming victory. We are charmed by the poetic description of virtue as aiming not at nor loving glory, in the sense (I suppose) of public acclaim, but we hesitate to believe that her only glory is "going on and still to be," or that our human destiny is

> Effort and expectation and desire,
> And something evermore about to be

The literal prose of this is, that we never achieve our destiny if it is *evermore* in the future, and a glory or value reflected on the present from a future always future is in truth no value at all. Conation may be the most fundamental feature of mind, whose most general attitude (attending) may be always prospective, but a life's behaviour is not one long drawn-out conation, and attending has its frequent results for cognition and feeling: an attention-process that does not build up apperception is useless. To be sure, there is hardly more acceptability in the popular religious notion of all the reward, value, or achievement being lumped together and reserved entire for a future and determinate date. Life and its striving must at least have a present value: it must be worth going through with on account of what it yields here and now. The truer Christian doctrine is in accord with this view: victory is not wholly reserved for the future but may and should be achieved now in part, and the ideal is not merely a Person still to be met but one who is meetable at any moment. But this truer doctrine has abandoned the idea of pursuit simply.

The Eastern mind has also abandoned the idea. The Brahmin, looking out upon life, is struck by its universally conative aspect, its restless and unceasing outpouring of energy: and as he sees the matter, nothing is ever gained by it all. Conation reaches its end only to halt for an instant and then start forward again towards another end, and so on eternally. To live is to suffer want and to be ever striving, but without success, to satisfy want, for which the root reason is that want and striving are bound up with the body and the world, and these are radically impermanent. We have longings to do and feel, and longings to know. Whatever we *do* is incomplete nor can we trust those who come after us to fulfil our intentions; if our doing is completed it has the fatal defect of impermanence. If we seek satisfaction in *feeling,* we find that this has to be continually and increasingly stimulated, until a point comes when further stimulation is impossible, and we lapse into disgust. We also long to *know,* but if we make the world our object the one thing that we certainly discover is its inherent transience. What then remains as a source of imperishable satisfaction? Simply this: to retreat from the world and the bodily life upon the central self, to quench activity in passivity (though employing the activity of asceticism) and to calmly contemplate the one thing that is permanent, viz., the pure ego that has severed itself entirely from the not-self. The Brahmin in his highest state is freed from all activity, even that of religious service, and in inferior states is continually reducing his interest and activity in the world. His ultimate aim is neither to do, to corporeally feel, nor even to know, but simply to *be,* to achieve identity with the pure world-soul. He has therefore rejected endeavour as valueless, and finds worth only in a static condition of attainment. In this Oriental position we have the extremity of onesidedness, with corresponding defects, but with the one clear merit of demonstrating most strikingly that in mere going on and on man finds nothing that he can approve as good.

But what of the contrasted idea of simple attainment as the desirable objective? As given in Brahminism its most obvious weakness is that it deprives us of morality altogether, for where effort is absent moral quality cannot appear. Buddhism carried the matter to its logical conclusion by virtually pointing out that if there is no not-self there can be no self. It accepted this conclusion, and preached the wisdom of acquiescing in the actual state of affairs, i.e., of lapsing into literal selflessness and therefore nothingness. We cannot doubt that the Buddhist shows the real issue of the position in question. On the one hand we are asked to acquiesce in a perpetual going-on, but here we are offered the refuge of a full-stop, which would indeed be a termination of our being as we now know it. The good as simple attainment has an hedonistic flavour; it is generally taken to be enjoyment in some sort —rest after labour, security after trepidation, unalloyed pleasure after an experience largely painful. We have noted this as an aspect of the popular religious view, and have seen how it gains a certain acceptableness. But enjoyment simply as such, having no reference beyond its present state, is not acceptable to normal manhood. Enjoyment is acceptable—to put it crudely—as an interval and rallying point between activities, i.e., as referring beyond itself both backwards and forwards. Pleasure is not itself a good, but a sign of good at most. Even popular religion is nowadays inclined to be mirthful about static heavenly bliss, and thinks rather of such sayings as "his servants shall serve him." In sooth, the prospect of unalloyed, self-centred pleasure is nauseating. Pleasure, in abstraction from every other quality of experience, must be rejected as the moral good by every serious-minded person. That is, to be perfectly good is more than to be pleased—since we take good to be the goodness of the person. And if we express ourselves again in terms of attainment, the result is similar. The stigma of folly rests upon the soul that invites itself to ease in contemplation of its attained security. Is the consummation of our moral life to be the complete grasping of some end-state, the while we congratulate our-serves on having nothing further to do or hope for? To have compasseed all our aim is to have ceased to be moral; but goodness as moral aim must be continuous or of one piece with goodness as moral endeavour. Even "perfect" goodness must still be moral in the sense in which we now understand that quality, else are we faced with an inexplicable hiatus within experience, i.e., a striving after goodness, or goodness simply, of one kind, and an attained goodness of another kind.

The sum of the whole matter is this: that final ethical value is not to be found in either pursuit or attainment, if the one is divorced from the other. Pursuit is justified through attainment, and the worth of attainment is guaranteed as it is an inspiration to further pursuit. In Psychology we need the notion of mental retention, the conservation of past living experiences in permanent and present dispositions, which are dispositions to further active experience. So in Ethics we need the notion of moral retention, the conservation of past moral attainment in a *general* disposition (since morality infects the whole man), which is a disposition to further moral activity. In a word, we need the notion of the Good Will. This notion embraces both pursuit and attainment, and in closest unity. Obviously it means incesssant pursuit. The very idea of will includes willing, the actual and deliberate attempt to gain some objective, as distinct from merely wishing for it, or giving it an unctuous blessing. And it can include willing an objective that had its first suggestions to us in the "phenomenal" world, or made its first appeal to our "lower" nature of instinct. Its ultimate suggestions, however, arise in the "intelligible" world, and its final appeal is to, and answerable only by, our genuine volition as manifested in particular acts of self-absorbing will. On the other hand, the good, taken as Good Will, connotes something already within our grasp. Will in its very nature must be more than occasional manifestations, otherwise it would be on a level with instinct. But it is rather on a level with the sentiments, especially with the permanent and pervasive self-sentiment, by which it is directed. So that its manifestations are of the settled general mode of feeling and acting. On this side of it, will is what is commonly known as willingness. Morally considered, it can become willingness towards good, or good-will in the popular sense. We ordinarily judge a man of good-will by his readiness to respond to worthy projects, or because we uniformly find him well-disposed towards our approach. We know him—again employing popular parlance, and without cant —as "a good man." He is such when not occupied with distinctively moral matters, and even when asleep. That is the *kind* of man that he is, as we would say. All this means that he has attained to a certain ethical condition that is relatively permanent, that he does even now display a positive moral stature. Not that he has already attained fully, but he has attained somewhat, and in moments of sober self-examination he has genuine cause for satisfaction in that something attempted has produced something done in the domain of character. He gets pleasure in being goodly-disposed: it would be inaccurate to say that he is well-disposed because he is pleased, unless we give another meaning to "disposition," or unless we have in mind that satisfaction is a reinforcement of further activity. For that is how the matter would appear to him: his attainment would be satisfactory as it would be recognized to facilitate further conduct of the same general kind. It would be highly unsatisfactory to such as he were it felt to be final and not to be bettered, just as, on the other hand, he would be dismayed at the prospect of a continual on-going unrelieved by any signs of achievement on the way.

The present writer can think of no notion that so adequately meets these demands of moral experience as does the Good Will. Pleasure alone cannot meet them, nor can perpetual reaching-out, taken by itself, but Good Will is a notion that combines both these elements. Observe, however, that it does not combine them as by a mere name for their harmonious interplay; so that they and not it are finally our concern. Rather are they grounded in and derive their significance from it. The good, we must insist, is not pleasure, or pursuit, or pleasure-cum-pursuit, but the Good Will. The good is the whole moral character, one and indivisible. It is as I have, or am, a Good Will that I enjoy attainment and prosecute endeavour that are morally valuable. These latter are expressions of the Good Will; or again they are means towards the further increase of willingness and direction of willing. On the whole, it appears obvious (at least to one person) that my *goodness* must be *my* goodness, the goodness of me: that as such it must be both a present possession and a future employment: and therefore that it must be bound up in the central feature of my being, viz., my will, which is the meeting and melting point of my capacities and activities. It may be insisted that this view really abolishes an Ethical ideal, since if I am doing my best now my will is as good as it can be, and I and my will are one; or it may be urged that the moral ideal is always ahead of us, whereas this view puts it within our present grasp as already realized. Taking the second objection first: it may be admitted that the perfect fulfilment of the ideal is still ahead of us, and that there is a sense in which we have not yet attained. Yet it must be denied that the ideal or its appropriation are entirely future; this is another form of that externalisation that we remarked upon at the outset. If the ideal for me is my perfect goodness, then it can be my ideal only as I am at present, and to some positive extent, good. It can be my goal only if I am on the path leading to it. As to the prior objection, we must reply that if we are doing our best at present, we are as good as we can be *at present,* though we may and should be better to-morrow. We cannot deny progress in goodness—indeed we have expressly sought to find its proper place—but it must be remembered that moral progress depends on earnestness, and that earnestness in turn means that I am doing my best to-day, and so *am* the best that I to-day can reach.

A more serious criticism of this position would lie in the revival of the charge often brought against Kantianism, that it furnishes only a formal criterion, and gives no leading as to the content of the good, and no means of deciding as to how the will is good. But, in the first place, no other theory has done more than prescribe the form of the good. Hedonism professes to be the most practical of theories, but it has its own difficulties. If it suggests the evaluation of conduct by the attendant pleasure, it becomes clear that present pleasure is not always a sign of unquestionable good; if it places the criterion in the utmost general happiness, not only is it involved in perplexity in the simple application of its calculus, but its standard is as formal as anyone could wish. In the second place, it is impossible in the very nature of the case to give more than the formal character of goodness. If we attempt to include pure content that is not itself general, and so formal, we are committed to the fully detailed description of every person's life and of all his activities. This would reduce us to the discredited minuteness of illegitimate casuistry. There is a casuistry that is legitimate, but only as it stops short at sub-principles, leaving every man to be in the last resort his own casuist. If we are unable to escape formality, then the theory of Good Will gives more lucidity than any other. But our task is not to escape from but to positively develop the form of the good. This means that we are to display the content of living in its most adequate organisation, for that life is (formally) perfect which is perfectly systematized or one with itself. And this involves empirical knowledge of the wealth of material that human life can offer for organisation, a knowledge gained chiefly through Psychology and the social sciences. We may accept the view that the instincts determine the ends for human striving, but of themselves they do not determine the reconciliation of the various ends which may be at variance. Each instinctive activity has its own form, but there is needed a higher principle of organisation to impose form on the instincts as co-existing and co-acting. What is needed is the unitary working of the conations as will, and the will is good when it is achieving the maximum of unity that is possible for the person at the time. Our whole position is based on two claims: (a) that perfect unity of the person is effected by and resides in his will, and (b) that this perfect unity of the person—or such measure of the perfection as is possible at the time—is the goodness of the person. The second claim must for the present be put forward as a dogma in the faith of its ready acceptability. The first claim is buttressed by many results of present-day science and philosophy. Many biologists are finding the explanation of successful organic functioning in a principle of entelechy, or of teleology, and numerous psychologists are invoking the same general category to elucidate the next stage of being, viz., mental functioning; and here the teleology gets fullest expression in explicit volitional control. There is a further stage, the spiritual (including the moral), wherein ideals are the prime determinants of the activities, and these are obviously unified by Will in its character of the ideal in action and settled governance. In a word, our goodness is a matter of our purpose, and our purpose is a matter of our Will. The conclusion is inescapable that moral good, as the goodness of persons, as the unifying of their nature (with its organic, mental and spiritual elements), and as the reconciliation of the necessary factors of pursuit and attainment—that this moral Good is the Good Will, and can be nothing other. Certainly it is that which all the world at present is a-seeking, for we are continually reminded on all hands that it is the solution for our many problems, and that peace on earth is possible only amongst men of Good Will.

NOTES BY THE WAY.

No. 2.

As Others See Us.

Christendom is governed in recent times by three several systems of use and wont, sovereign action-patterns induced by the run of past habituation: (a) the mechanical system of industry, (b) the price (and credit) system, (c) the conception of national integrity. The existing industrial system is dominated by the technology of physics and chemistry. The price system is dominated by absentee ownership. The nation, considered as a habit of thought, is a residual form of the predatory dynastic state of early modern times, with some superficial alterations due to a suffusion of democratic and parliamentary institutions.

—H. Veblen, in *Absentee Ownership.*

MODERN CAMBRIDGE PHILOSOPHERS

By A. Rex Knight, B.A. (Syd.). Trinity College, Cambridge.

A FEATURE of the study of philosophy in Great Britain is the eagerness with which each fresh contribution to the store of philosophical knowledge is discussed in undergraduate circles. Professor Stout had scarcely enunciated his new conception of the nature of universals before his arguments and conclusions were being dealt with by the Jowett Society in Oxford. Professor Whitehead's *Concept of Nature* had hardly issued from the press before the Cambridge Moral Science Club set itself up to try his case. And it is not only in what has already been published that the interest is keen. Students from Edinburgh had prepared us for Professor Kemp Smith's new book long before it appeared; and we have for some time been wondering whether Professor A. E. Taylor's promised work will justify the opinion that close acquaintance with *Principia Mathematica,* and with the writings of St. Thomas Aquinas, has caused him to modify the views which he advocated in his *Elements of Metaphysic.*

There are, of course, several reasons why this should be so. Students of philosophy at the larger English and Scottish universities are not under the necessity of passing an examination in any non-philosophical subject: they are not compelled, both to write metaphysical essays, and to elucidate obscure lines in Lucretius. Further, they can attend lectures on contemporary philosophy, and they are in daily and intimate contact with some of the greatest contemporary philosophers themselves, whose mental gymnastics they can watch and criticise in lecture-rooms, in conference halls, and at tea-parties. Now, that all these things are advantages which are not equally enjoyed by students in the dominions, I know from my own experience. Still, most Australian students of philosophy have time to pay *some* attention to the writings of present-day philosophers. And it is in the hope of interesting those who have not hitherto had any interest in modern developments, as well as those who have, that I am writing this brief account of five of the men who have made Cambridge one of the chief centres of philosophical interest.*

I.

Professor James Ward, whose name is as familiar to psychologists as to metaphysicians, is the oldest, and probably the most famous, of this group. In years he is a contemporary of Mr.

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* I have dealt only with those philosophers who are chiefly concerned with metaphysics. Professor Sorley and Mr. W. E. Johnson are also important men. but their work deals almost exclusively with ethics and logic respectively. [This article was written before the lamented deaths of Bradley and McTaggart.—Editor.]

Bradley, and indeed he wrote one of the first reviews of *Appearance and Reality*. But, while Mr. Bradley now contributes nothing to metaphysical or ethical speculation, Professor Ward has promised to write an account of himself and his views for the second volume of *Contemporary British Philosophy,* and to read the introductory paper at a symposium which is to be held in November.

Professor Ward's chief contributions to speculative philosophy are to be found in *Naturalism and Agnosticism* and *The Realm of Ends*. His philosophical system is a spiritual monadology; and in this respect as in others, he has shewn himself a close follower of Leibniz. He may, I think, fairly be called a "mental pluralist." For, in contrast to those who hold that there exist things, whose existence or character is in no way dependent on the existence of minds or of Mind, he maintains that everything which exists, either is, or contains, a mind or a state of mind. And, in contrast to those who deny that there is a plurality of existents, or a plurality of purposes, in the universe, he urges that there exist "animated individual things," each of which strives to preserve and improve itself. Professor Ward takes pains to defend his pluralism, and to put forward arguments for the position that all that exists is mental. Like Leibniz, he wishes to do away with the distinction between the organic and "what we call" the inorganic, and to insist that they differ from each other only in degree.

But, although Professor Ward is a pluralist, he nevertheless holds that the idea of God is ontologically and teleologically necessary to the completion of the idea of the Many. He thinks that "we are led both on theoretical and on practical grounds to conceive a more fundamental standpoint than this of the Many, namely that of the One . . . as ultimate source of their being and ultimate end of their ends."* God, however, is to be though of, not as a mere abstraction—an inconceivable Absolute, in whom contradictions are somehow "reconciled," and evils somehow "absorbed"; nor yet as an omnipotent Chess Player, who "with men for pieces plays." God implies the world, and would not be God without it. He is, in some unusual sense, the Creator of the world; but the world was not created merely as a means to the divine end: and although He "transcends" the world, He is the "ground" of the world, and "immanent in every part of it." He is not related to the world as its external cause. He is not an omnipotent Being, who created the world merely to satisfy a desire, but a non-omnipotent Person, who is within the world, and who differs from other parts of it, only in the magnitude, and not in the character, of his attributes.

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* Cf. *The Realm of Ends*, p. 442

It is interesting to note that Professor Ward does not limit the power of God through deference to the existence of evil, but because the idea of an omnipotent *One* is thought to be incongruous with the idea of a *plurality* of existent particulars. The course of the world is regarded as being set towards the Good. And the existence of evil is considered to be necessary in order that, through sorrow and pain, men may "learn by heart" that only righteousness exalteth a nation, and that those who pursue evil perish.

From this account the similarity between Professor Ward and Leibniz will be sufficiently apparent. Both hold that the universe consists of a number of animated individuals, each aiming at self-development. Both assign to God merely a place among other individuals, regarding him as a sort of "big Monad," who somehow enters into the other monads, and yet transcends them all. And both deal with the problem of evil in much the same way. Indeed, so great is the similarity that I think most of the objections which are valid as against the *Monadology,* are also valid as against *The Realm of Ends.* Neither system deals adequately with the considerations which have led men to draw a sharp distinction between what they describe as material and what they describe as mental. And neither system is convincing in its treatment of the existence and nature of God, or of the way in which a finite God, who is merely a part of the world, can yet have created the world, and can give a unity to the many varied purposes of its different constituents.

Of course, much of what both systems assert *may* be true. And Professor Ward realises that belief in his system will not come as the result of reasoned argument, but will require an act of faith. But, although many of the things which he says concerning faith are true, there are some important points with which he does not deal. It is one thing to hold that some ideas come to us as the result of a process which is not that of conscious ratiocination. It is quite another to assert that such ideas are specially exempt from any examination by logical criteria of truth. And, while the exigencies of life often demand that we should act on assumptions, and not wait to tbe rationally convinced, there is no good reason why we should believe any theoretical proposition about the universe which is neither obviously nor demonstratively certain. And, even if it could be shewn to be desirable to believe any such propositions, the mere desirability of the belief would not establish the truth of what was believed. The arguments by which Bishop Blougram sought to convert Mr. Gigadibs, simply won't do.*

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* Professor Ward's work in psychology, and his view that the difference between psychology and the natural sciences is *not* one of subject-matter, could not be profitably dealt with here.

II.

Dr. McTaggart, who, until last year, was the Supervisor in Moral Sciences at Trinity College, and still delivers lectures on modern philosophy, is also interested in theological dogmas. But, unlike Professor Ward, he thinks that, in the case of most of them, there is no conclusive evidence that they are true, or even probable. Dr. McTaggart is very opposed to the view which holds that true religion can be possessed as well by the ignorant as by the wise. Nevertheless, he is very suspicious of any "grateful and comforting mixture of idealistic metaphysics and edifying social and ethical theory"; for he holds that too many such mixtures have nothing to recommend them beyond the comfort which they confer on those who accept them. According to him, no religion is justifiable unless it is based on metaphysics. And, seeing that this involves that religion is justified for only a few people, he argues that this consequence proves, not that his premises are false, but that religion is one of those "praeclara" which are "tam difficilia quam rara."

Dr. McTaggart does not deny that those who believe in the existence of an omnipotent beneficent God are likely to derive much happiness from their belief. But, in *Some Dogmas of Religion,* he concludes, as the result of detailed argument, that, although the arguments for the existence of a non-creative non-omnipotent God are more plausible than the arguments for the existence of either a creative omnipotent God or a creative non-omnipotent God, they are far from convincing. His discussion contains many important points, concerning the traditional arguments for the existence of God, which are very often overlooked, both by those who use the arguments, and by those who seek to refute them.

In the same book Dr. McTaggart deals with the problems of free-will, of the immortality of the soul, and of pre-existence. In the free-will controversy he is a convinced determinist, unafraid to declare openly that Buridan's ass would surely die. As regards the other problems, he considers it probable that immortality is true, and that, for this reason as well as other and independent reasons, it is also probable that pre-existence is true. These chapters, too, will delight anyone who appreciates concise logical argument interspersed with lively illustrations.

The more constructive, and what Dr. McTaggart himself considers the more important, part of his work is contained in *The Nature of Existence,* the first part of which alone has been published. In this book he is patiently and carefully working out an elaborate deductive system, which is of such a kind that it justifies Dr. McTaggart in saying "Ontologically I am an idealist."* Except for two empirical premises (that something exists, and that what exists is differentiated), he claims that his system is wholly *a priori.* He professes to have shown, by pure logic, that everything which exists must have certain properties, in particular that the universe consists of selves, groups of selves, parts of selves, and parts of groups of selves, and that these different elements must stand in a certain relation of "determining correspondence." And, since it seems clear that spirit is the only thing which can have this property, therefore nothing but spirit exists, and we "misperceive" things as matter and as existing in time. *True* perception is a relation of love—the perceiving self loving the perceived self. "This is the fact which decides all other emotions. If I love A, I shall regard myself with reverence, because I love him. If I indirectly perceive B, by perceiving A's perception of B, I shall regard B with a feeling which may be distinguished from love by calling it affection. And I shall regard with complacency the parts of selves whom I regard with love, self-reverence, or affection." Thus, so long as veridical perception exists, the universe is bound together by love.

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* Cf. his article in *Contemporary British Philosophy* (vol. 1).

Like all elaborate metaphysical systems, Dr. McTaggart's excites a sceptical attitude even when one cannot see what is wrong with it in detail. And, in addition to its apparent completeness, which alone is enough to raise doubts in the minds of all who know how fragmentary our knowledge is, it contains certain extraordinary conclusions, which certainly *seem* to contradict observed facts. His denial of the reality of time and change, and his conception of things as "selves," are notions which do not wear their truth on their sleeves. But they have at least been held before by different philosophers, even though the opinions of those other philosophers may not be exactly the same as Dr. McTaggart's. Such is not the case with his view of perception. In calling true perception a relation of love, Dr. McTaggart claims that he means by "love" just what is ordinarily meant by the term. Now, from this it will follow that we only truly perceive other people, for it is ordinarily held that it is only other people whom we can love. Dr. McTaggart might reply that, because things are really selves, we can perceive them too, since we can love them. But this would overlook the fact that we do not ordinarily speak of loving things, and would imply that his meaning of love is not the usual meaning. Since we mean by love a relation which can hold only between what *we* call selves Dr. McTaggart is in an unfortunate dilemma. Either he is wrong in claiming that he is using "love" in its ordinary sense; or his theory implies that we never truly perceive what we call things. And there are further difficulties connected with the obscurity of the idea of anyone "indirectly perceiving B, by perceiving A's perception of

B." For my part, I think Dr. McTaggart's views about love and affection are in the same boat as Spinoza's: they are perfectly valid —so long as we remember that the meaning given to "love" is one which nobody else ever gives it.

It must not be thought, however, that Dr. McTaggart is one of those castle-builders about whom Thomas Reid had such hard things to say. He is not concerned *only* with the splendour of his superstructure: he *does* try to make sure that the foundations are securely placed. His philosophical edifice has not been built in a day; and, even by those who think it merely a house of cards, it is admitted that the cards fit very neatly together. Most of his critics are able to point out the discrepancy between what he claims to have arrived at deductively, and what common-sense claims to know by experience. And it is clear that this discrepancy demands that the system should be rigorously tested before it is accepted. But few have attempted this examination, and still fewer have been able to lay their finger on any logical flaw in his armour. It is probably *possible* to show either that his premises are false, or that the chain of his argument contains a weak link: still, this possibility does not justify the ridiculous opinion, common among those who know nothing of his work, that he is merely a somewhat imperfect reproduction of Hegel, and can safely be neglected.

III.

The creation of the present Cambridge School of Philosophy—if it can be called a School at all—is due to the Hon. Bertrand Russell and to Dr. Moore. By insisting on the need of the analytical method in philosophy, by occupying themselves chiefly with the task of laying bare fallacies in idealistic systems, and by favouring certain opinions about the nature of physical objects, these two men have caused Cambridge to be regarded as the home of scientific philosophers, and of "Neo-Realism." They are still anxious to be thought of as scientific; but, because there has been an astounding rush to the banner of Neo-Realism, and Mr. Russell and Dr. Moore do not like their new company, they now prefer to give no name to their views as a whole. All that they ask is that philosophers will practise the logico-analytical method, and not neglect certain facts and considerations which they themselves have taken care to point out.

Mr. Russell is a very prolific writer. His style is very pleasing, and varies in character from the rhetorical fervour of his essay on "The Free Man's Worship" to the clear-cut precision of *The Principles of Mathematics.* His writings are always occupied with one or other of three things: (1) explaining the fundamental concepts which mathematics takes as indefinable, and proving (*a*) that pure mathematics deals exclusively with concepts definable in a small number of fundamental *logical* concepts, and (*b*) that all its propositions are deducible from a small number of logical principles; (2) advocating scientific method in philosophy, and a scientific attitude towards life; (3) discussing the nature of physical objects, and possible structures of the world.

An article such as this is no place to consider in any detail Mr. Russell's important and revolutionary work in mathematical logic. But something may be said of the method which he thinks all philosophers should employ, and of the results which he thinks he himself has obtained by employing it.

The method which Mr. Russell advocates is scientific method. Philosophy, he contends, should aim only at understanding the nature of the world, and not directly at any other improvement of human life. The philosopher, like the scientist—or because he *is* a scientist, must preserve a strict ethical neutrality. He must forget his likes and dislikes, his hopes and fears, and consider, not what the world *ought* to be, or what he would *like* it to be, but simply what it *is*. And the essence of philosophy at present is analysis, not synthesis: "Divide and conquer" is the key to success here as elsewhere. "Most philosophies hitherto," he declares, "have been constructed all in one block, in such a way that, if they were not wholly correct, they were wholly incorrect, and could not be used as a basis for further investigations . . . A scientific philosophy such as I wish to recommend will be piecemeal and tentative like other sciences; above all it will be able to invent hypotheses which, even if they are not wholly true, will yet remain fruitful after the necessary corrections have been made. The possibility of successive approximations to the truth is, more than anything else, the source of the triumphs of science, and to transfer this possibility to philosophy is to ensure a progress in method whose importance it would be almost impossible to exaggerate."*

Mr. Russell also desires that the scientific attitude towards life and the world should become general, and, in this respect, is very similar to another philosopher who also talked of the joy of discovering truth, and of the virtues of "free men." To be free from the bondage of the emotions and passions, to seek chiefly for sure and certain knowledge, to do what one can to make the lot of others happier—these are the Spinozistic virtues which Mr. Russell gives to "The Free Man," whose worship he has so eloquently described.

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* *Mysticism and Logic,* p. 113.

The scientific mood and method should be evident, not only in our dealings with philosophy, but also in our dealings with other men; and we should exercise as much care in estimating the value of a political policy as in discussing the relation between body and mind.

It is a tribute to the scientific method that only those who use it are able to make valid criticisms of Mr. Russell's theories about the nature of the external world. Mr. Russell holds that what we call "things"—trees, chairs, tables, etc.,—are really collections of possible appearances. The lamp, at which I am now looking, is just that collection which includes the certain colour, and shape, and size, which I see, together with all the different colours, and shapes, and sizes, which different people, standing in different positions, would see, if they directed their eyes towards what we ordinarily call "the lamp." And the collection not only includes different colours and shapes and sizes, which are visual sensa (*i.e.*, given to the sense of sight), but it includes as well all the tactual, auditory, and other kinds of sensa which could possibly be sensed by people standing in certain positions relative to the lamp. A "thing" becomes, then, a collection which consists of my present sensa (a certain colour, a certain shape, a certain size, a certain sound, a certain temperature, a certain hardness, a certain smell) together with an indefinite number of sensibilia (*i.e.,* all colours, shapes, sizes, etc., which, though not being sensed by anyone at present, would exist as sensa for people who stood in different positions relative to what common-sense calls the "thing"). The sun is the collection which consists of (1) the sensa I have when I look at what men innocently, but wrongly, call the sun; together with (2) all the sensa which would be sensed by percipients at all the possible distances from what we ordinarily mean when we talk of "the sun."

There are several objections to a view of this type. (1) In the first place, its intelligibility depends on the existence of things *in our sense*. Mr. Russell's collection is not a collection of *all* the appearances which would appear to men, wherever they were, and in whatever direction they were looking. The collection, of which Mr. Russell says the sun consists, does not include the appearances which appear to the man who is looking down his nose, but only all those appearances which appear to those who are looking towards *what we call the sun*. And so, in order to define his collection, Mr. Russell must assume that things in our sense, exist. He endeavours to escape this difficulty by saying that A and B will be both members of the collection which is a thing, if A is related to the other sensa of the person who is sensing (or could sense) A in the same way as B is related to the other sensa of the person who is sensing (or could sense) B. But, when we probe deeper, it is clear that the collection, which Mr. Russell calls a thing, is a collection of all the possible sensa of the same thing *in our sense.* (2) Secondly, there are several difficulties connected with the fact that Mr. Russell has never dealt with the observer's body in terms of his theory. And (3) Thirdly, if to those actual and possible *present* appearances, which are members of Mr. Russell's collection or "thing," we are to add all those appearances which the thing (in our sense) has, or could have, exhibited in the past, and those which it will exhibit, or will be able to exhibit, in the future, it seems that we must deny the possibility of *change.* For then the wood is not really changed into ashes when I put it on the fire; both the wood and the ashes have always existed, but first the one "appears," and then the other. And although I *talk* of having come from Australia to England, I am really still in Australia: indeed I have all along been in both places.

These are but three of the difficulties which Mr. Russell's theory involves. However, Mr. Russell himself would readily admit that it is not a theory at all, but merely a tentative hypothesis. This makes it a very convenient target for those who are more intent on securing verbal hits than on helping to disentangle the complexities of nature. But I do not suppose for a moment, either that Mr. Russell is completely satisfied with his theory, or that he is not as aware of the objections to it as I am.

IV.

Dr. G. E. Moore, who has dealt so many death-blows to different idealistic systems, is the very opposite of Mr. Russell in the matter of writing. His style is concerned only to express the truth in as precise a manner as possible: he has published only three books, and of these two deal with the same material,* and the other —*Philosophical Studies*—is merely a collection of articles which had previously appeared in different philosophical journals. Moreover, "while Mr. Russell produces a new theory of the world every few years, Dr. Moore never produces one at all." He spends his time subjecting all such theories to a rigorous examination, pointing out the objections which may be made to each, and inculcating an attitude of suspense in regard to them all. He has a positive hatred of vagueness, and a positive passion for exactness. These qualities make for progress in philosophy; but they do not make for love among philosophers. And it is not to be wondered at, if he has incurred the displeasure of those philosophers whose views, though plausible in themselves, he has shewn to lead to the most absurd conclusions.

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* *Principia Ethica,* and *Ethics* (Home University Library).

The way in which Dr. Moore employs his devastating critical acumen may perhaps be called "the method of inevitable consequences." He takes a certain theory—as for example, Mr. Bradley's doctrine that no relations are purely external—and shows that the propositions, which it asserts, imply other propositions, which are certainly false. In his essay on "William James' Pragmatism,"* he first points out that, by rejecting the "copy" view of truth on the ground that *all* true ideas do not "copy" reality, James' implies "that no theory of truth will be correct unless it tells us of some property which belongs to *all* our ideas without exception." He then shows that, since James regarded his own theory as a theory of "what truth means," therefore he must wish to assert "that not only many but *all* our true ideas are or can be verified; and that *all* of them are useful." And it only remains for him to shew that neither of these statements is true. This is always his method, both with other people's opinions and with his own. It is always his aim to find out, with regard to *any* proposition, whether it does not lead to conclusions that are false.

Dr. Moore's lectures deal with the relation of sensa to physical objects, and with the nature of the self. He divides all theories about the first into three types: those which assert that the sensum is a part of the surface of a physical object; those which assert that there is a relation between the sensum and the surface of the physical object, but that this is not the relation of part to whole; and those which regard the sensum as an "incomplete symbol" in Mr. Russell's sense. Dr. Moore considers many different theories under each type, and, at the end of the course, there is scarcely any philosopher, living or dead, who has not been dealt with. He thinks that all three types rest on a number of unproved and unprovable assumptions, but that the objections to the second and third types are less than the objections to the first type. The result of his meticulously accurate discussion is that one sees how presumptuous that man is, who thinks his own theory definitely right, or someone else's definitely wrong.

The notion of the self is treated in similar fashion, and the conclusions reached are also similar. The same need for suspense is urged, even though Dr Moore thinks it "almost certain" that the theory which holds that the self is a *particular* is the "most probable."

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* *Philosophical Studies,* p. 97 ff.

Most of Dr. Moore's published work has to do with ethics, and his two books on the subject contain some of the most valuable contributions that have ever been made to the subject. But, as I have deliberately banned ethics from this discussion, I shall mention only that he concludes that "good" is an ultimate, indefinable predicate, which cannot be identified with "pleasure" or "what is desired" or any similar notion. He accepts the distinction between intrinsic and instrumental good, and holds that the rightness or wrongness of an action is entirely determined by the relation which its effects bear to intrinsic good. Motives, he contends, and other mental states are important in determining a man's character, but they are irrelevant to the ethical nature of his acts.

V.

The last philosopher whom I wish to consider is Dr. Broad, who was an undergraduate at Trinity in 1910, and Professor of Philosophy at Bristol in 1920. He is now back at Cambridge, having succeeded Dr. McTaggart as Supervisor in Moral Sciences at his old college. He is, of course, much younger than the other Cambridge philosophers of note, but it is very doubtful whether he has not already become as famous as any of them.

Dr. Broad used to be more interested in the natural sciences than in philosophy; but, during the last ten years, his interests have changed in relative importance. And, although he still keeps himself *au fait* with every advance in the special sciences, he is now mainly occupied, both in his discussions and in his lectures, with philosophical problems.

Dr. Broad has "a natural dislike for every kind of *Schwärmerei* and enthusiasm in philosophy," a strong aversion from the oracular style of writing on philosophical subjects, and little patience with those who use it: he is very opposed to those who would rather be muddled with ease than be clear with difficulty, and he thinks that it is far simpler to cover confusion with glittering rhetoric than to express the truth exactly. As befits one who holds these views, his own writings, though charming in their fluency and humour, are perfectly clear and straightforward; and every line of his works conveys the impression that he is concerned, not to advocate this or that thesis, but only to discover the truth and expose falsehood. This frame of mind is very evident in his attitude to mystical experiences and to spiritistic phenomena. Mystics, he thinks, have been too much neglected; and, "in so far as the capacity for mystical experiences can be cultivated by a suitable mode of life . . . without detriment to the critical faculties, it deserves the serious attention of philosophers; for theories which are built on experiences known only by description are always unsatisfactory."* And his attitude to the phenomena dealt with by the Society for Physical Research is very similar. He has always thought that the way in which scientists treat such phenomena is both dishonest and ridiculous—an opinion, which, he says, "has been strengthened by subsequent intercourse with the skeletons which inductive logic keeps in its cupboards."*

In *Scientific Thought,* which was published only last year, Dr. Broad (1) expounds the Theory of Relativity, "without entering too deeply into those logico-mathematical complications which are inevitable when it is applied in detail"; (2) discusses the problems connected with the notions of time and change, making some answer to the arguments by which Dr. McTaggart has sought to disprove the reality of these apparently fundamental features of the universe; and (3) points out, with great care and in detail, "the sensible and perceptible facts which underlie the highly abstract concepts of science, and the cruder, but still highly sophisticated, concepts of common sense."

The more purely philosophical problems with which the book deals are two: to clear up the meaning of physical "shape," "size," date," "duration," etc.; and to determine the ontological and epistemological status of sensa. He concludes that sensa are no mere fictions existing nowhere and nowhen, but that they form a group of existents whose members bear to each other peculiar relations which obtain only among sensa. "It seems clear," he says, "that either (1) sensible determinates (such as some particular shade of red) do not inhere in regions of physical space-time, but in regions of some other Space-Time; or (2) that, if they do inhere in regions of physical Space-Time, they must inhere in the latter in some different way from that in which physical determinates (like physical motion) do so."* And these alternatives he considers, not as mutually exclusive, but as complementary.

This theory is, in effect, an attempt to combine the main tenets of realism with Professor Whitehead's distinction between "sense-objects," "perceptual objects" and "scientific objects." But Dr. Broad does not regard the result of his argument as a final result. He expressly remarks that "we still await the man who will show us in detail how the world of physics and the world of sensible appearance are united into the one whole of Nature."* And he only claims to have stated some of the facts which such a man "will have to take into account and to unify." The importance of *Scientific Thought* lies in the reasoned argument with which it is neatly packed: and its charm is due to its entertaining style—a style that will interest those who know no philosophy whatever, and no mathematics beyond what they learnt "at their mother's knee."

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* These quotations occur in his contribution to *Contemporary British Philosophy.*

* *Scientific Thought,* pp. 543-4.

* *op. cit.* pp. 547-8.

Dr. Broad delivers two courses of lectures: one on general philosophical problems, and the other on Descartes, Spinoza and Malebranche. In the first, he deals with a variety of subjects—monism, pluralism, the relation of body and mind, the notion of cause, etc., and he treats them all in that precise and thorough manner which used to flabbergast Mr. Russell, when he was a Fellow of Trinity and Dr. Broad was an undergraduate. In the second course, his fair-mindedness and hate of being captious are also apparent. Having made what external criticisms of Spinoza's system he thinks are important, he never repeats them, and confines himself to the *internal* development of Spinoza's thought. He tries to give Spinoza—as he tries to give everyone else—the best possible "run for his money."

It will be appropriate to conclude with a reference to Dr. Broad's distinction between critical and speculative philosophy.* For this distinction is not peculiar to him, but is one of those points of agreement among Cambridge philosophers which justify one in talking of the Cambridge "School" of philosophy. Dr. Broad clearly distinguishes between (1) the analysis of the concepts and principles used by science and common-sense, and (2) the construction, on the basis of such analysis, of a system of Reality. He thinks that the former is what we should be chiefly engaged in at present, and that "the main value of Speculative Philosophy lies, not in its conclusions, but in the collateral effects which it has, or ought to have, on the persons who pursue it." This distinction is, of course, just the distinction which Mr. Russell draws between analytic and synthetic philosophy. But Dr. Broad has worked out the point in greater detail: and, in any case, it is a distinction whose influence on the practice of Cambridge philosophers could scarcely be exaggerated.

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* Cf. *Scientific Thought,* Introduction, and his article in *Contemporary British Philosophy.*

ANATOLE FRANCE—AN APPRECIATION.

By Professor J. Alexander Gunn, M.A., B.Sc., Ph.D.,
University of Melbourne.

ANATOLE FRANCE is dead. But we may add, "Long live the French genius!" He was in many respects its embodiment. All lovers of France and its literature mourn the passing of the creator of L'abbe Coignard, Monsieur Bergeret and Sylvestre Bonnard. He was a superb artist, a keen psychologist, a critic, satirist and philosopher. Nothing human was alien to him. *L'artiste,* he himself remarks, *doit aimer la vie.* It is this intense interest in life, in all the variety of its manifestations, which lay behind and inspired all his work.

"France" is the *nom-de-plume* he used in place of his own surname, Thibault. In youth, Anatole was a child of Paris and spent much time among books both in his father's little shop on the Quai Malaquais, and in the curious folding boxes which are strapped to the wall along the banks of the Seine. He "browsed" freely among the "bouquins," observed the varied "types" of his own city, did not over-study, and developed along a line which was not the conventional one pursued by school learning. In his studies, however, he was keenly interested in all concerning Greece. The intense humanism of the Greek dramatists and philosophers appealed to him powerfully. Although his mother was a devoted Catholic and he himself received his training at the College Stanislaus, Anatole France was too deeply imbued with the spirit of humanism in its fullest and deepest sense to accept the teaching of the Roman Catholic Church. Yet his works reveal a temper which respects true piety. He was too human to disrespect things which are sacred to the hearts of men, and he smiles at the enthusiastic rationalists who aim at the abolition of religion and its replacement by science. Anatole France combined in a remarkable manner the characteristics displayed by Montesquieu, Voltaire, Renan and Taine. The influence of these masters of thought and style is seen in his own work, and he acknowledged his debt to them.

Some of his books, such as *Balthasar, The Well of St. Claire,* and *Mother of Pearl* displayed sentiments which remind one of Voltaire, but the critical satire is veiled by the erudition and historical narrative. The last contains the dramatic short story *The Procurator of Judaea.* His *Thais,* which is now a feature of the Opera House in Paris, is a play intended to counteract doctrines of pure asceticism. The narrative concerns a monk, who, failing to convert a courtesan from her ways, realises at the same time the narrowness of the cloistered life.

We would, however, be taking a false view of this great novelist if we estimated his mind by these productions alone. His irony and satire come into play more powerfully when he is dealing with the great features of human society, such as the Law, the Army, Philosophy and Politics. His great satire, *Penguin Island* is one of his best known works, but it is, in some respects, as satire surpassed by *The Opinions of Jerôme Coignard.*

Anatole France's power of story-telling can be seen in his first novel, which he published in 1879 when he was thirty-five, *Jocasta and the Famished Cat,* in *The Red Lily,* and notably in *The Gods are Athirst,* and *The Crime of Sylvestre Bonnard.* This last, a charming work, was crowned by the *Academie francaise* and raised its author to European fame, in 1881. Most of his works are available now for English readers in translation from "The Bodley Head." No translation, however excellent, can do real justice to the inimitable style of Anatole France. His French is a joy and a supreme delight. Its exquisite grace and charm are inimitable, and highly fascinating.

It is not this alone which constitutes his title to fame and honour. His ideas are as important as his style. He is philosophical, not in a systematic sense, but he is an observer, a spectator of human affairs, an interpreter of human life in all its aspects and colours. He takes us to all corners of society, to the dressing-rooms of the actresses of the Odeon Theatre, or to the study of the pious priest. His genial criticism falls on all. This is very marked in *Crainquebille, Pierre Nozière, My Friend's Book,* and his series of novels dealing with contemporary life, particularly *M. Bergeret in Paris,* which introduces that great episode in recent French national life, the Dreyfus affair, with its intense anti-semitism and anti-clericalism.*

If in Anatole France, religion and conventional morality seem at times to be severely handled, we must note also his condemnation of the arrogant tones of science and of the blatant voice of demos. He sets his face, too, against the prude and the hypocrite; he smiles also upon the warm ardour of the radical reformer or revolutionary. The fixed belief in human progress, which is a great dogma for so many minds, calls forth his criticism and genial pessimism, **which** is after all but a severe "positivism." Anatole France disbelieved in a *"law* of progress," and as a critic of our "civilisation" he warned us sternly by urging the danger which besets humanity, namely, that it may bring fatal disaster upon itself in continually fighting and quarrelling over matters in which it should co-operate. He warns us solemnly against a facile optimism.

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* This work should be compared with *Jean Barois,* a drama-novel by Roger Martin du Gard, dealing with the same episode.

The Abbé Coignard, France's great character, remarks in one place, "I take little interest in what is done in the King's Cabinet, for I notice that the course of life is in no way changed and after reforms men are as before, selfish, avaricious, cowardly, cruel, stupid and furious by turns, and there is always a nearly even number of births, marriages, cuckolds and gallows-birds in which is made manifest the beautiful ordering of our society. This condition is stable, sir, and nothing could shake it, for it is founded on human misery and imbecility—and those are foundations which will never be wanting." The Abbé goes on to remind socialist revolutionaries that new economic schemes will not radically change human nature.

Yet Anatole France believed in *les idées forces* and could assert the opinion that "our ideas create the future." He showed himself to be a great humanitarian, a good European, a citizen of the world, possessing an international mind, and he handed over the total amount of his Nobel Prize for literature (£12,000) to the starving people of Russia.

Great as a writer, Anatole France, like his fellow countrymen, Renan and Voltaire, possessed the capacity for careful observation and criticism of the society in which he found himself. To that extent he was a philosopher in the widest sense. Human society continually needs such men who can hold the mirrow before its face and remind it of its defects, its follies and its idiosyncracies.

NOTES BY THE WAY.

No. 3.

The Open Secret of Christianity.

The kingdom is not merely for the world to come. The well-being of mankind here is not to be despised, or set aside as something Christianity is not concerned with. But the essence of Christ's teaching is that well-being is not to be sought in any particular form of polity, whether the divine right of kings, as some of our fathers thought, or the establishment of democracy, as is more popular at the present day, or the social revolution, as some would believe; nor in the spread of education; nor in the increase of material wealth, in fruitful commerce and wisely organised industry, but simply in each person seeking to live according to God's will and to act righteously. If we do all that, other goods will inevitably come. This is the secret of Christianity, and just so far as the world has accepted it has there been real human progress. The Golden Age comes by each man acting rightly.

——From A. C. Headlam's *Life and Teaching of Jesus Christ.*

THE PRESENT STATUS OF PSYCHOLOGY*

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I.—The General Outlook.
II.—A Review of Courses and Equipment.
III.—Developments in the University of Sydney.
IV.—Future Possibilities for Psychology in Australia and New Zealand.

I.

THE growth of a popular demand for psychology is shown in the marked increase of losses in that subject under the auspices of the University Tutorial Association of the British Empire. The following figures illustrate this development rather strikingly:—

Year	Total Numbers of Classes	Numbers of Classes in Psychology and Philosophy	Approximate Percentage
1914-15	154	9	6
1921-22	359	50	14
1922-23	363	62	17

Nor is this movement only English; in Australia present classes in Psychology amount to 17 per cent. of the total, the predilection being most marked in New South Wales, and in Wellington, N.Z., where there are strong psychological departments within the Universities. In Canada the ratio is even as high as 20 per cent. In U.S.A. a similar state of affairs exists. Though there is no concerted movement corresponding to the University Tutorial Class system, each of the great Universities conducts special extension classes. Though no collected figures are available, yet a glance at the various University "programs" shows that Psychology is not least favoured among the subjects offering.

Within the Universities the demand for undergraduate and graduate training in Psychology is equally notable. Among the older British Institutions, London and Cambridge have long possessed laboratories, while some of the others have established chairs and lectureships. The newer Universities and Colleges are also following upon these lines of development.

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*The contents of this paper were reported to the second Annual General Meeting of the A.A.P.P. held in Melbourne in May of last year. At the given to work done at Sydney was due to the fact that general interest has been evinced in this new department and its organisation. With this explanation the detailed description offered should need no apology. But the courtesy of the various heads of the departments of Philosophy in Australasian Universities, their opinions and comments upon the status and development of this subject are here incorporated. The thanks of the writer are due to these gentlemen for their ready and whole-hearted response to his request for information.

Among the ranks of "systematic" Psychologists the names of Ward and Stout among English speaking psychologists are second only to that of James. Myers, formerly lecturer in experimental psychology at Cambridge, and now President of the Institute of Industrial Psychology, has taken over the psychological investigation carried out after the War by the Industrial Fatigue Research Board. The work of Spearman and his London laboratory are also widely known. Lloyd Morgan, Emeritus professor at Bristol, is famous as one of the pioneers in animal and genetic psychology. In Canada there is an equally marked development; nearly all the long established Universities have both chairs in the subject and laboratories. The Toronto department of Psychology, a particularly noteworthy example, offers a unified three years' course to students in "Arts" and "Science" which is also obligatory upon medical students intending to qualify in psychiatric medicine.

In Germany the establishment of Wundt's laboratory at Leipzic was soon imitated by many other Universities. The movement there has been firmly established upon experimental lines, and many new developments have taken their rise in the country of Weber, Fechner Ebbinghaus, Kulpe, Marbe, Meumann, Stumpf, Ach, Stern, and Lipman. Russia had her Netschajeff and still maintains psychological laboratories. Italy has developed in this line considerably of late. Geneva produced Flournoy, and still possesses her Claparede. In France, Janet is still continuing his work on the line of abnormal mentality, while the immortal name of Binet is her pride.

Psychological developments in the United States, though later than the German, are no less notable. The works of William James are almost as fresh to-day as when they were first written. Most of the English texts of note, e.g., those of Angell, Pillsbury, Titchener and Woodworth, are by American authors. In addition, Titchener at Cornell has done very much for the experimental side by the establishment of experimental research and standardisation of laboratory procedure. Muensterberg did much for general Psychology and, in addition, laid the foundations of procedure in vocational testing, which has been followed up by Scott and Hollingworth. Cattell at Columbia fathered mental testing, and Woodworth as his student has continued the work. Terman standardised the Binet tests and established them on a sure footing by the "Stanford" revision. In the applied psychology of music Seashore has achieved a unique fame. The chair of James at Harvard is held to-day by McDougall, from Oxford. The names of Thorndike of Teachers College, Columbia, and educational psychology are indissolubly united; his pioneer work on the learning processes and scales of educational achievement having established that branch of the science upon a sure foundation, where before all was vagueness. In addition the army mental tests developed under the Presidency of Yerkes—now occupying the chair at Yale—opened up the field of mental testing by facilitating methods of procedure.

Such is the status of the work beyond Australia and New Zealand. In these countries developments have been of exceedingly slow growth. As an approach towards the teaching of Metaphysics and Ethics a general course in Psychology is given by the various departments of Philosophy, but in the main, these courses are given with the general idea of development towards the former subjects. One of the first approaches towards the teaching of Psychology as an independent science was made at Victoria University College. Wellington, under Professor Hunter, whose work under Titchener has borne fruit in the establishment of a local laboratory and a regular course of experimental work. At Auckland the recent appointment of Dr. Fitt as professor of education should result in the development of courses in experimental work. In Tasmania Dr. Morris Miller as lecturer in Psychology has developed the work along the lines of the study of mental deficiency Tasmania leading all the States in such legislation which especially prescribes the care, education and treatment of "aments." At Teachers College, Melbourne, lectures in Experimental Psychology have been added to the curriculum. Dr. Phillips, of Teachers College, Sydney, a former pupil of Spearman, has fittingly taken up the work of mental testing, and already with his assistants has published this year a Sydney revision of the Binet tests. Professor Muscio, the author of "Industrial Psychology," and formerly psychological investigator for the Industrial Fatigue Research Board, England, now holds the chair of Philosophy at Sydney; Associate-Professor Lovell is in charge of the new department of Psychology. His work has been to organise and develope the teaching of the subject; his especial interests lie along the lines of Social and Abnormal Psychology, in the exposition of which his recent monograph "Dreams" is a first fruit. The experimental work is mainly in the care of the writer.

II.

In an enquiry into courses, equipment, and staffing of departments of Psychology one naturally turns to the United States for information. With a singular frankness and courtesy all available opportunities are afforded the investigator whether native or foreign. Not only have various analytic studies of the status of Psychology been published, but the writer has collected certain first hand data concerning equipment, etc., by means of a questionnaire and personal observation.

In a "Report upon the present status of Psychology," McGeoch* lists the following branches of psychology as most frequently taught. This report covers over one hundred institutions.

Subject	Total Credit	Number of Institutions
General Psychology	482	96
Social Psychology	175	57
Experimental Psychology	326	57
Physiological Psychology	64	16
Educational Psychology	306	51
Animal Behaviour	80	25
Business Psychology	27	9
Genetic Psychology	19	7
Abnormal Psychology	54	16
Psychology of Religion	24	9
Applied Psychology	45	11

Next to General Psychology, the subject most generally favoured appears to be Experimental Psychology, and next Social Psychology. The greater number of hours in the former would of course be due to the longer time necessary for laboratory work. While the need of the former subject is obvious, the demand for Social Psychology evidently springs from a desire to provide a psychological approach to Sociology. In the list of applied fields a general course in Applied Psychology takes high place, while courses in special applications to Business follow it closely. Strangely enough to Australians the Psychology of Religion comes next in importance, following on the recognised need of the American clergy for a knowledge of human nature in regard to Religious problems.

While no single laboratory reported the possession of every piece of apparatus tested by the inquirer, there is a fair assortment of apparatus returned which appears to be fairly general. These include the following:—

> Brain specimens and Models, Campimeter, Chemicals for taste and smell experiments, Chronoscope, Coloured papers, Colour mixer, Dynamometer, Ergograph, Galton Whistle, Galvanometer, Holmgreen Worsteds, Metronome, Plethysmograph, Projection apparatus and Slides, Resonators, Rotator, Rotating and Balancing Platform, Stop Watch, Stereoscope and Slides, Tuning Forks, Vision Testing Apparatus, etc.*

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*Colorado College Publications, No. 103, Sept., 1919.

This list may be looked upon as a minimum basis of equipment for a small laboratory devoted to the teaching of Experimental Psychology. To provide for a number of students, more than one of some of these pieces would be required, while any particular laboratory would find it needful to add much additional apparatus for special experiments designed for a local course.

The growth of psychological laboratories is shown in the return for the decades from 1880 on, in the increasing number of new ones established.

Decade	Number of Laboratories Established.
1880-1890	3
1890-1900	17
1900-1910	20
1910-1919	22

The writer's own questionnaire refers only to fourteen of the associated Universities, with which in staffing and numbers of students, the Universities of Adelaide, Melbourne and Sydney might be compared, though in many cases they would be somewhat exceeded. The information is mainly in connection with experimental work, both in the nature of teaching and research. Only approximate averages are given.

Number of Graduate Students	13
Number of Graduate Students engaged in Research	10
Number of Teaching Staff	10
Hours per week devoted to teaching	2 to 4
Laboratories and Research Rooms	23
Lecture Rooms (*slightly under*)	3

Apparatus Grant: $1900; in addition in four cases the services of a mechanic.

It is evident that the experimental side of Psychology is taken very seriously. Indeed in almost all the Universities, candidates for graduate degrees in psychology must offer the results of a piece of original experimental research as part of the work. Not only does such investigation sort out those individuals better fitted for degrees, but it fosters the right attitude of enquiry among those who are eventually to become teachers of the subject. As a consequence psychology is very much alive in the U.S.A.; most members of the University and college staffs are keen controversialists, and many engage in, and further research in their departments. Similar conditions obtain in German Universities and are gradually spreading in British Institutions.

On the other hand the facilities in Australia and New Zealand leave much to be desired. The University of New Zealand has recognised Psychology as a subject for the advanced B.A. course, and B.A. course with honours, as well as for the Science and Commerce degrees. At the same time the subject also serves as an introduction to further study in Ethics and Metaphysics. The new courses for 1926 provides for Experimental Psychology or an optional course in Social and Abnormal Psychology, both for pass and honours. Before these subjects may be undertaken, much remains to be done both in regard to staffing and the provision of equipment. The only University College so far equipped for such work is Victoria University College, Wellington. About 60 students out of 120 are taking the prescribed laboratory course, which covers a general range of experimental work in the subjects of Sensation, Perception, Reaction, Time, Memory and Attention, etc. Out of ten honours students eight are taking laboratory courses, while one B.Sc. and one Ph.D. candidate are each developing a problem in experimental research. Six rooms, including two dark rooms, with a fair amount of apparatus are available.

In Tasmania the usual qualifying course introduces the student either to Psychology or Philosophy. The second year involves some practical work, also work in the Psychology of Individual Differences. The Department is under the direction of an independent lecturer, who is also director of the State Psychological Clinic, and a member of the Mental Deficiency Board.

In all the other Australian Universities, except Sydney, a course in General Psychology shares with Logic the office of a general propaedeutic to Philosophy, and is under the control of its professor. More or less apparatus for lecture demonstration appears to be available, and in some cases further courses in Abnormal and Social Psychology are offered by the departments of Philosophy or of education. In certain Universities lecturers in the department of Philosophy, some of them part time workers, give courses in Social and Abnormal Psychology. With the exception of those Universities specifically mentioned above, and the University of Sydney, no separate recognition is given to Psychology alone, the subject being treated as a branch of Philosophy.

III.

Until 1910, the teaching of Psychology at Sydney was undertaken by Professor Anderson, of the Department of Philosophy. Dr. H. Tasman Lovell was then appointed to the department, and took over the first year courses. By means of a small grant apparatus was secured from Germany, first for use in the initial course, and later for use with an elective second year course in Psychology alone. This second year embraced Abnormal, Social and Experimental Psychology. In 1921, the MacCaughey chair of Psychology was established, and Dr. Lovell appointed its first occupant as Associate Professor. The further appointment of an additional lecturer made possible the establishment of the present courses.

The work at Sydney now covers a period of three years, and is intended to provide a conspectus of the general field of Psychology, so that a student who has passed through the various courses will be familiar with the main principles, methods, apparatus, and technique of the subject, as a preparation for specific research. The first course, listed in the calendar as Philosophy I. is also the introductory course to Philosophy, and, in addition, is accepted as a course in the Faculties of Science and Economics, and as an introductory course for graduate students seeking the Diploma of Education. The work covers sixty lectures in Psychology and thirty lectures in Logic.

In all from two hundred and fifty to two hundred and seventy students attend these lectures, which are repeated as an evening course in addition to the day lectures. The ground covered is based on the text of Woodworth, with a treatment of such other aspects as appear necessary. Throughout the course, especially in the analytical treatment of cognition, feeling and conation, the treatment is a practical one. Demonstrations are constantly given, and illustrated by the use of apparatus as is the case with an exposition of the physical sciences. The class is used as subjects, and approximate quantitative results are tabulated on the blackboard. Such a method requires not only the use of special laboratory apparatus, but special demonstrational material as well, both of which sides it has been our purpose to develope.

Students seeking distinction are required, in addition to the general course, to do special work for two terms, comprising one lecture a week, and laboratory work of from two to three hours per week. The subjects for the laboratory course begin with a series of problems in learning, e.g. *Effects of Simple Practice*—substitution of Morse code: *Effects of Fatigue*—tapping and cancellation; *Motor Learning*—star tracing; *Trial and Error Methods*—puzzle solution; *Rational Processes*—solution of problems; and *Association Tests*—reference being made to individual differences in these. Students next pass to a study of the *Skin Senses, Vision,* including colour and various aspects of monocular and binocular vision, and *Hearing.* Finally some experiments in *Memory* and *Attention* are undertaken. The experiments are written up weekly and handed in for correction and assessment. During the last term laboratory work is not given, but the distinction class meets weekly for the discussion of special texts upon which an examination is set in March. In addition students are then required to hand in a thesis on a given theme.

All the material for the laboratory course is comparatively inexpensive, and, if one may be permitted the colloquialism, "student proof." Thus our most costly apparatus for this course consists of six disc tachistoscopes costing thirty shillings each, made locally to an original design; they possess the advantages of being comparatively noiseless, and do not give a double exposure when being set. The effects of the laboratory course are to be observed in the quality of the March theses, in that students tend to keep to speculation based on known facts, instead of offering vague generalities or groundless hypotheses.

The second year course in Psychology covers two fields, that of the study of Social and Abnormal phenomena, and the study of individual differences by means of Mental Tests. In the former course, abnormal aspects are used to illustrate general principles, and such aspects of psycho-analysis are lectured upon as will best illustrate the dynamic aspects of what might be styled in Bjerre's term "psycho-synthesis." This part of the course covers sixty lectures. In addition students are required to write one paper a term for this part of the course. The work in Mental Tests also covers sixty hours, half of which are devoted to actual testing work. In the lectures various phases of the underlying principles of mental tests are treated, e.g. the arrangement of data and elementary principles of statastics, the history of their development, and their educational, industrial and sociological applications. Various forms of single and collective tests such as cancellation or U.S. Army Alpha are given by the group method, and in the last term at least ten subjects must be examined by every student by means of Koh's Block tests, and the Stanford Binet, the results of these being correlated. In connection with this class a clinic is held weekly, patients from the adjoining hospital psychiatric clinic being referred here for psychological examination as well as other subjects from outside who may require help along the line of vocational guidance, etc. In the equipment are included an extensive collection of paper tests, many of the pieces of test apparatus prescribed in Whipple's Manual, a considerable number of form boards and performance tests, and some original material made to our own designs; Students are expected to familiarise themselves with the technique of their administration. A complete record of method of giving tests and their class results, including in a laboratory note book, is also required. Distinction students of this year are further required to write a special paper for March, on a set theme in abnormal or social psychology, or in lieu of this certain students may elect to undertake a special piece of research in mental tests. In addition, they are required to sit for March examination set on specified additional texts.

The third year in Psychology is based on an experimental course, with special *quantitative* treatment of data. This is really designed as a course for distinction students who wish to take up special applications of psychology in a more or less professional aspect. One lecture per week on history, methods and statistics is given, and five hours per week are devoted to laboratory work. For two terms the student works upon special problems from various texts, or researches not included in these. This year's problems supplement the laboratory work for distinction in the first year, and at the same time familiarise the student with forms of special laboratory apparatus, and their technique. The experiments are designed to be representative rather than exhaustive. When written up they are prefaced by a history of previous investigations, then the students records are treated, and finally comparisons and conclusions are arrived at from all the foregoing. In the last term, a special piece of experimental resarch must be undertaken by each student.

For this whole course a general laboratory equipment such as mentioned above is provided. Some of the original pieces have an historic value since they were presented to the University by Professor Netschajeff, who was representing Russian Psychologists at the Australasian meeting of the British Association in 1914. Others have been purchased in England, America, or Germany, while many others have been made locally from original or catalogue designs. The annual grant is expended partly on the up-keep of old material and necessary supplies and partly in the purchase of new pieces. In addition to laboratory work, certain aspects of general Psychology are again taken up in the form of a comparative treatment. The texts of such representative writers as James, Stout, Titchener, Ward, Wundt, Watson, and Woodworth are now treated from the outlook of these writers upon the definition, content and methods of Psychology as a Science. This work is prepared for March. During the current year only two students have been allowed to take the course, though over twenty have applied, on account of lack of laboratory supervisors. In addition to the foregoing, the department is called upon to provide thirty-five hours' special lecture and laboratory instruction in general Psychology and in mental tests, to graduates in medicine who are working for a diploma in Psychiatry. It is hoped that with a necessary addition to the staff in the shape of laboratory help, it will be possible in the future to admit a greater number to the third year in psychology. The present staff of an Associate Professor and Lecturer is quite unable to do more than cope with the necessary lectures and supervise a limited amount of laboratory work.

The complete course is designed to afford a minimum of training primarily for those intending to take up Psychology as a profession, as well as for others such as medical students and teachers interested in psychological aspects of their work. To those of the former class the future is full of promise, if one may judge from developments abroad. In industry the psychologist should prove of immense economic benefit to managements, by developing methods that will reduce wear and tear of both human and mechanical material, while on behalf of industrial workers he should be able to reduce fatigue and nervous strain. This would be accomplished by studies in fatigue conditions, by the use of mental tests in vocational selection, and by the development of motion study methods and improvements in machine control. In the schools clinical workers should prove of advantage in selecting and advising in regard to retarded and psychopathic types of mentality, elimination of nervous speech defects, and affording vocational guidance to pupils about to take up the secondary phase of their education.

IV.

It is hardly possible to postpone for much longer psychological developments in Australia and New Zealand. As already indicated, advances have been made or are about to be made, in both these countries. The recent resolution passed by the second annual meeting of the A.A.P.P. in Melbourne:

"That this meeting records its strong belief that the status of Psychology in Australasian Universities should be raised, in particular by the additional provision for teaching and experimental research,"

indicates that the claims of Psychology to separate recognition have not escaped the notice of those interested in these matters. Two possibilities of organisation present themselves: The first of these is along the lines upon which Sydney has developed, i.e. that the new department shall take over and teach every aspect of Psychology, i.e., of introductory and later courses in General, Social and Abnormal Psychology, General Mental Testing, and Experimental Psychology. This would place a heavy responsibility upon a new department. The second alternative is that only limited portions of the science shall be treated by the new department, e.g. especially the experimental, social and abnormal aspects; and while an introductory course would be administered as at present by departments of Philosophy, courses in mental tests would be taken in departments of education. Certainly such an arrangement would divide up the subject piecemeal from a psychological standpoint, but on the other hand it is improbable that sufficient money could be found at once by the several Universities, to establish new departments along the former lines. Again it is improbable that Philosophy would care to disestablish itself of its claim upon the introductory course in Psychology, since the metaphysical aspects of the science would in all likelihood never be treated in a scientific presentation by an independent department. The concourse of opinion of heads of departments as shown in their communications to the writers is towards this second line of development, and as their opinions will carry most weight in any future developments, it is probable that future chairs or lectureships will be for Experimental Psychology, and inclusive of Social and Abnormal Psychology. Such being the case, it is to be hoped that in addition the treatment of General Mental Tests will be included in the departmental course. To hand this branch entirely over to Departments of Education would be to lose control of a very important field, which could never be adequately covered by an educational approach. Mental tests bear only a partial reference to education, and this truth is borne out by the fact that they were originated and developed by the psychologist rather than the educationist; the more important work in vocational testing would probably be neglected if such were the case. It is the opinion of the writer, therefore, that the treatment of general aspects of mental test work should be retained under the care of the teacher of Psychology, while its educational aspects might be directly cared for by the department most concerned with it; and he is aware of only one important American University where all the work of mental testing is handed over to education, the others following the procedure advocated here.

One other question has been raised in connection with new chairs and lectureships; that is, to what University faculty they shall be attached? In most cases the problem will solve itself, since the lectureships will obviously be attached to departments of Philosophy. With regard to professorial chairs, they may be established as in the case of the foreign institutions in connection with faculties of Medicine or of pure Science, in place of Arts. The former alternative would probably not operate disadvantageously, since a more liberal provision for upkeep would probably be made, for Arts is by no means a "spending" faculty. On the other hand, something would be lost by severing connection with Arts and Philosophy with which the Psychology necessarily has much in common.

One field of work yet remains for recognition, that of Applied Psychology, with its special applications to the field of industry and commerce. It is hoped that at Sydney with the shifting of the responsibility of the logic courses in the first year to the department of Philosophy, it will be possible to institute courses in Business and Industrial Psychology. The technical contributions of the science along this line have recently been so great and numerous, that an enlightened commercial community will demand that such instruction be provided for students intending to engage in business pursuits. It is to be hoped that all psychological departments established in the future will attempt to develop this side. If any science is to receive recognition and support, it must justify itself by its contribution to public welfare as well as by its abstract knowledge. Psychology has here much to offer, and new departments will develop in prestige accordingly as this aspect is borne in mind.

Up to the present, with rare exceptions, psychology has been the step child and Cinderella among University subjects in the Universities of Australia and New Zealand. Abroad this is obviously not the case. In these countries, however, professional and lay opinion is swinging about in regard to its recognition. Within a few years it is to be hoped that a liberal provision will be made, both to support the chairs and lectureships that must inevitably be created, as well as to provide essential equipment for teaching and research. Many years ago Cattell, the original founder of the department of Psychology in Columbia, wrote:—"The nineteenth century witnessed an extraordinary increase in our knowledge of the material world, and in our power to make it subservient to our ends; the twentieth century will probably witness a corresponding increase in our knowledge of human nature and in our power to use it for our welfare." Many of the great discoveries in Psychology yet remain to be made; many of its fields are mere "backwoods" with immense potentialities of exploitation. The present is their time of development. Surely the authorities of our Universities cannot turn aside, unwilling to share in such splendid possibilities! While the subject will develope through controversy and the subsequent systematisation that results from this, many problems can only be solved by a frankly empirical approach, necessitating laboratories, equipment and trained research workers.

PSYCHOLOGICAL STUDIES

I.—REPRESSION IN "HAMLET."

By Professor L. H. Allen, M.A., Royal Military College, Canberra.

After reading Clutton-Brock's essay on "Hamlet," I turned again to J. M. Robertson's "The Problem of Hamlet," of which Clutton-Brock's essay is, in part, an attempted refutation. Mr. Robertson considers that the character of Hamlet presents irreconcilable inconsistencies because of the manner in which, he thinks, the play was written. Shakespeare, working on an older play on the same theme, probably by Kyd, was forced to keep faith with his public by following the main outlines of a well-known story. In the older play the only obstacle to Hamlet's revenge was a purely objective one, viz., the care with which the King kept himself guarded. Shakespeare subtilized the play, and having removed this rather crude delay of the action, substituted, particularly in the soliloquies, confused mental hesitations which are not consistent with the actual course of the story. This theory has been mentioned, because it brings home the fact that, before we can begin our estimate of the play, we must decide whether we take the interior or exterior view. Without giving reasons, I take the interior, or subjective, view, believing that the psychology of "Hamlet" is consistent, and that it is absurd to regard Shakespeare as having written with one eye on the box-office. The knowledge that there was an earlier play on the subject neither helps nor hinders a critical estimate. Even if it were found I doubt if it would be of much help. We are justified in examining the play by and for itself, as an artistic unity.

The consistency of Hamlet's character (and the prince is practically the play) will elude complete understanding. It might be said that its consistency is precisely its inconsistency. Almost anything you like to say of him is true, for he is human nature in a confusing oscillation. That oscillation is the touch of abnormality by which the psychologist is best able to examine normality. But while anything you may say will be true, it will not be wholly true. It is here that Mr. Robertson errs. He can pick a hole in every theory that has ever been advanced, from which he concludes that all are wrong. They are, but not wholly wrong.

The two most comprehensive views of the problem presented by the play are those of Goethe and Coleridge. Each reflects the nature of its author. Goethe's is somewhat milk-and-werthery, that of Coleridge indicative of his meditative mind. One significant addition has been made by Bradley. These views are, (I give them shortly), Goethe, Hamlet the shattered idealist; Coleridge, Hamlet the brain-bound man; Bradley, Hamlet the victim of psychic shock.

Bradley's view is the bridge to modern psychology. It opens the subconscious world and tries to understand the causes and symptoms of his malady.

I attempt no more than to polish a facet of Hamlet's nature. I have thought that we do not sufficiently recognise the element of repression which betrays itself in unreasonable inhibitions and impulses.

He must have been desperately lonely at Elsinore. What drab associates! Is there a single character that lets in sweetness and light? Horatio? Ophelia? Let us look at them.

It may have been necessity which made Hamlet seek a friend in Horatio, but the picture of Elsinore is even more depressing if it had nothing better to offer. He is almost as shadowy as "Fidus Achates." He speaks little else than platitudes. Hamlet's eulogy of him is unbalanced idealism.

Ophelia is a true daughter of Polonius. She learns wisdom from her father as he learnt it from his—by rote. She seems incapable of originating an idea. Her weak rebellion against parental despotism, when she tries to vindicate the character of Hamlet's love for her, is quickly crushed. Imagine Rosalind as Polonius' daughter!

Yet both Horatio and Ophelia are amiable if colourless. The loyalty of Ophelia to her father indicates the sort of wife she would have made; and the steadfastness of Horatio's friendship is wholly admirable. In friend or wife Hamlet asked no more than this. He wanted living endorsements of his soliloquies, not companions.

If there had been no tragic circumstances the position, in this respect, would have been much the same. It is rash to speculate on Shakespeare's intentions in any part of his work, but it is tempting to suggest that in Hamlet he meant to portray, amongst other things, the loneliness of genius. Shakespeare's contemporaries could not have completely understood his greatness. He could not have understood it himself. But it must have disclosed itself to him in fits of alienation from his kind. Such a mood often interprets itself to its victim as its contrary. He imagines that the time is out of joint. When first we see Elsinore it is not alienated from Hamlet, but merely puzzled over the strange behaviour of one who was really much beloved. Had the ghost never appeared Elsinore would have jogged on, a little sorry for, a little amused at, its Inexplicable. After the visit of the ghost it is not so much Elsinore's view of Hamlet, as Hamlet's of Elsinore that concerns us. It is such a view as the genius, in his atrabiliar moments, might take of the world.

With Shakespeare such moods would have been momentary, because his plays provided him with an outlet for expression. Part of Hamlet's gloom is due to the lack of such relief. He falls just short of being a creative mind. The torture of "the little more and how much it is," is that fruition is in sight, whereas to the duller minds it is not. Hamlet is of the Tantalids. He could not have originated a system of philosophy. His note-book system implies his weakness. He thought in swift but unorganised epigrams. One cannot picture that restless scintillating brain settling to the drudgery of developing a philosophy.

In literature he would have been no more successful. Even as a literary critic he presents a problem, for though he makes acute observations, it is astonishing that he admires "the rugged Pyrrhus." It seems inconsistent that a man who could give such excellent advice to the players should admire such verse. It is obviously a burlesque of a passage from the "Dido" of Marlowe and Nash. Shakespeare hints at his intention of ridiculing them by making Hamlet say that there was "no matter in the phrase that might indict the author of affection." Could anything be more affected than

"roasted in wrath and fire
And thus oer-sized with coagulate gore,
With eyes like carbuncles"?

Why should Hamlet admire this picture of a Cyclops run amok? Because Shakespeare wished us to understand one of the dangers of the insulated mind, the vice of *superbia* the contempt of the ordinary merely because it is ordinary. This expresses itself in preciosity, the affecting of what is "caviare to the general": When preciosity aims at the grand tone, as in "the rugged Pyrrhus," it often produces nothing better than the primitive colossal.

This explains Hamlet's failure as a poet. I assume, avoiding controversy, that he wrote the play within the play. Its language is what his agile but uncreative mind would have teased out. It is a mortarless pile of *sententiae.* The over-compression of his mind is symbolised by such epigrams as

"For women's fear and love holds quantity,
In neither aught, or in extremity."

His attempt at an amorous lyric results in doggerel which makes unnecessary his confession that he is "ill at these numbers."

"Doubt thou the stars are fire;
Doubt that the sun doth move;
Doubt truth to be a liar,
But never doubt I love."

How such lines must have jarred on Shakespeare's exquisite lyrical sense! They were meant to creak because philosophers are not poets.

It also seems extraordinary that the man who disliked seeing a passion torn to tatters admired the player for his burst of tears. In reality there could be no better delineation of his mental condition. It is Hamlet's unwilling confession that at least the player can feel, that no intellectual bar comes between his soul and its expression; that therefore this chance-blown visitor is his superior. A crude emotion expressed is better than a fine one inhibited. This explains Hamlet's elation at the success of his play. It was not that the King's guilt had been unmasked. The dumb show alone would have been sufficient for that. He was sure enough of it in any case, his doubts about the genuineness of the ghost being merely reluctance to carry out its injunction, in other words, disguised inhibition. His joy was the joy of artistic achievement. His ruse had been successful. As a poet he had found convincing expression. His first exclamation after Claudius' flight is not one of triumph that he is now justified in bringing retribution on a murderer, but one of artistic vanity. "Would not this get me a fellowship in a cry of players?" It is a self-conscious author bowing before the footlights.

With regard to his inhibitions he is partly the cause of them. Without any tragic circumstances his natural reticence would have marked him out as one to be approached gingerly. When it becomes morbid through shock he partly justifies the world's attitude towards him, creating thereby a vicious circle. This appears most evidently in his first encounter with Rosencrantz and Guildenstern. He begins with a charming frankness. The mood develops, and he is on the edge of an intimate piece, of confidence. It is almost out in the fine speech beginning "I have of late—but wherefore I know not—lost all my mirth." It describes nervous depression intensified to morbidity, and the health in him seems here to be struggling to throw it off. A relaxation of his automatic constriction of mind would have done him good, but at this moment the "friends" simper their misunderstanding, and drive him back on himself. Here is a revengeful irony, for he helps to create the atmosphere he cannot dispel. The same thing lies at the back of his rejection of Ophelia. When a few straight and heartfelt words might have altered the course of his life he finds that he is being spied on, and that she is seemingly a party to it. He shrinks before the situation and becomes enigmatic.

These are reasonable inhibitions, being imposed by genuine causes from without. Nevertheless they are the working of the vicious circle. It is the unreasonable inhibitions which are his real trouble. Let one instance suffice. Why should Hamlet refuse to tell Horatio at once of the supernatural message? Because the ghost would speak to none but him? A conceivable but unlikely reason. It seems due rather to hysteria. In such a state the subconscious is apt to master the conscious. We see this occurring before the appearance of the ghost when Hamlet descants on the Aristotelian tragic hero with his "vicious mole of nature." He is obviously expounding himself to himself, not a normal condition of mind. When Horatio and Marcellus come upon him after the disappearance of the ghost he is in a state of repellent levity, a symptom of hysteria. Here we can see the conscious and subconscious Hamlet in conflict. The former would like to tell his friends the truth. Why should he not? He intended immediate action. But the latter automatically forbids it, and, as often, provides him with an excuse to mollify the conscious Hamlet. *They will reveal it.* So he makes a tragic *ducdame* of the matter. But his rational mind could never have believed such a thing of the man that he wears in his heart, which is shown by the fact that later he tells him, since he says:—

> "There is a play to-night before the King.
> One scene of it comes near the circumstance
> Which I have told thee of my father's death."

With regard to unreasonable impulses, one of the most significant is his conduct at the grave of Ophelia. His envy of the Player repeats itself here in variant form. The impulse behind Hamlet's outburst is disguised envy of Laertes. The disguise takes the form of contemning Laertes' emotion because its utterance is artistically offensive. Hamlet can ridicule his melodrama with an aesthete's superciliousness, but the unpalatable truth remains that a shallow man can be sincerer than a profound one. Laertes can cast every restraint aside, and express himself. Hamlet cannot, and he can only vindicate himself by ridiculing what in reality he respects. I call this an unreasonable impulse, because, though it is a rebellion of the true against the false in himself, it is a blind one, and results in an act of unreason. Hamlet afterwards admits its indecency to Horatio, giving as the cause of it only that which the pride of his conscious mind will recognise:—

"The bravery of his grief did put me
into a towering passion"

His explanation to Laertes, that it was madness, is merely contempt for a commonplace intellect.

In the foregoing I have only sketched the trend of a thought. It might serve, however, as a reminder that before we talk of inconsistencies we must be sure that they exist. Thoughts or actions that seemingly conflict are often psychologically consistent.

NOTES AND NEWS.

The Council of the Australasian Association of Psychology and Philosophy have elected the following office-bearers for 1925:—

President: Professor J. McKellar Stewart, M.A., D.Phil. (Adelaide).

Vice-Presidents: Professors W. Anderson (Auckland), W. R. Boyce Gibson (Melbourne), T. A. Hunter (Wellington), H. T. Lovell (Sydney), B. Muscio (Sydney), M. Scott Fletcher (Brisbane).

Editor of Journal: Emeritus Professor F. Anderson.

Hon. General and Business Secretary: Dr. A. H. Martin (Sydney University).

Hon. Treasurer: R. G. Watt.

Hon. Counsel: C. M. Collins, B.A., LL.B.

Hon. Auditor: W. Bruce Rainsford, A.I.A.A.

The Third Annual General Meeting of the Association is to take the form of a short Congress beginning on May 22nd, at Sydney University. The Presidential Address will be delivered by the retiring President, Professor W. R. Boyce Gibson, M.A., D.Sc., of Melbourne University. It is expected that other visitors will include Professor J. A. Gunn (Melbourne), Professor W. Anderson (Auckland), and Dr. E. Morris Miller (Hobart).

RESEARCHES AND REPORTS.

SOME PSYCHOLOGICAL TESTS APPLIED TO ENGINEERING WORKSHOP APPRENTICES.

By A. H. Martin, B. C. Doig, and R. Simmat, Psychological Laboratory, Sydney University.

[*One of the chief branches of Industrial Psychology is Vocational Guidance. This attempts to discover the capacities required for different types of work and to guide young people into occupations for which their endowments fit them. Investigations have been made to determine vocational fitness in a variety of occupations; for instance, in many engineering processes, in printing, in telegraphic and telephonic work, and in clerical occupations. The article which follows gives a practical illustration of some of the methods used in vocational investigation.*]

I.—INTRODUCTION.

The principles of vocational selection developed from the original work of F. W. Taylor, the efficiency engineer, who, in 1911, in his work on "Industrial Efficiency," published the first account of such an experiment. He selected girls for their speed and accuracy in the sorting of steel ball-bearings and he found that, after selection, thirty-five girls could do as much in an eight-hour day as one hundred and twenty working before selection. Professor Münsterberg, of Harvard, developed this principle of vocational selection on a basis of psychological tests and embodied his results in his work on "Industrial Efficiency," published in 1913. The field of work thus opened up was explored by many American psychologists, and culminated in the well-known American "Army Tests." While the war called a halt in investigations into industrial selection for vocations, it gave a decided impetus to such military tests as those for aviators, gun-sighters and "submarine listeners," not only in America, but among the European belligerents. Post-war developments have been rapid; most European countries have enthusiastically adopted the method. In England, Dr. Myers, late head of the psychological laboratory at Cambridge, has founded the National Institute of Industrial Psychology, an organisation established for the direct purpose of research into the psychological problems of industry. In Australia, however, the work has made but little headway, owing to the absence of facilities for laboratory training of workers. So far as the writers are aware, one Sydney firm has sent a psychological worker for training at this University, and is utilising the results of her work, but in regard to original investigation in this country, this paper is believed by the writers to be the first.

The work of testing was carried out during the months of February and March, 1924, in the worshop of a large engineering firm. The use of a special room as a laboratory was arranged for, and about sixty appentices were tested. All facilities possible were made available by the firm, such as the use of direct current for apparatus, etc., and even the construction of special apparatus not in the possession of the University laboratory. The subjects were apprentices falling into four groups, numbering from twenty to seven, conditioned by the factors of their age, length of service and proficiency. The work ranged from simple shop problems to brass lathe work and work in the tool room. These divisions complicated the results to some extent, since a homogeneous group would have rendered the problem a more direct and less involved one. As a medical inspection for physical fitness was passed by each subject on admission to apprenticeship, this aspect of the work was taken for granted, leaving only psycho-physical and psychological abilities for the work of testing. By a method of "job analysis," the possible operations involved in the various departments were covered so far as it was possible by the different psychological tests involved. One of the investigators spent some time both in the shops and in consultation with one of the research members of the staff, in order that no detail in this regard might be overlooked.

As a result the following factors were decided on as the essentials for satisfactory work:

1. General intelligence; or ability to meet the problems involved in a general situation with prudence and foresight.

2. Perceptual and motor intelligence, or ability to meet the problems of a concrete or practical situation.

3. Keen powers of judgment involving sensory discrimination.

4. Motor abilities of various types.

The results of these tests were then measured up against the combined estimates of a foreman and two sub-foremen, since no objective rating by means of individual output was possible. The usual rank correlation methods were employed. Tests giving a fair positive degree of correlation with foremen's rating were retained; but if tests showed a high intercorrelation with each other as well as with foremen's ranking, then that one which showed the better correlation in the latter case was alone retained. The results of the tests thus finally selected were combined, and this final ranking was correlated with the foremen's ranking. In the case of this figure of correlation being high, they were to be retained as tests that might be considered as diagnostic of ability in shop work.

II.—TESTS AND SCORES.

1. *General intelligence* was tested by means of the well-known U.S.A. army alpha group test.* This consists of eight distinct types of tests, the individual items of which are arranged in progressive order of difficulty. The types comprise such forms as "instructions, analogies, tests of common sense, simple arithmetic problems, and items of general information." In the last case many of the items were distinctly local in character, but as conditions were alike for all subjects this inflicted no individual penalties, but only involved the attainment of a slightly lower general score than would be possible for an American group.

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* Army Mental Tests. Yonkum and Yerkes. Henry Holt and Company. New York. 1920.

2. *Concrete intelligence* involved two tests:

(a) *Koh's Block Test*:* The problems include a series of pattern cards arranged in order of progressive difficulty of execution. The material consists of a set of cubes coloured differently on each face; two of these being divided diagonally and bicoloured. Time and errors are involved in the score based on a definite scale worked out by the originator.

(b) *Link's form Board No.* III.:† This test is really one of discrimination and assembling. Various pieces are cut out from a thin board and laid out in a certain order. Some of these pieces involve a certain possible degree of confusion in the subject's mind, but they vary sufficiently to prevent them from fitting into other than their correct places. Since the original was not procurable by us in time, a model was constructed from a catalogue plate, the design being as closely followed as possible. The score is the time taken, with a certain imposition for errors, the lowest amount of time thus standing as the highest score.

3. *Sensory Discrimination.*

(a) *Length* For this purpose a Galton Bar was used. This consists of a white bar divided by a thin black thread at the middle. A sliding metal sheath covers each end. One half was exposed with the standard measurement of 15 cms., and the subject was required to adjust the other end till a portion equal to the standard was exposed. Five trials were given with the adjustable end in a position considerably less than that of the standard and five from a position considerably greater. The score was taken as the average error for the ten trials.

(b) *Space.* A circular ring of wood fibre with an inner diameter of 15 cms. was turned, and three pins were driven through until they projected slightly at the back. When the ring was pushed down on a sheet of paper on a flat board, the pins held the paper to the board and marked out a perfect circle. To prevent shadows the ring was bevelled inwards almost to an edge. The subject was required to indicate the centre of the circle by a slight cross. Measurement of the amount of error was effected by an inside ring which was fitted exactly into the original. This inside ring was covered by a sheet of celluloid and marked from the true centre by means of concentric circles scratched on the celluloid. The circles were blackened by smearing the scratches with Indian ink, thus readily allowing an estimate of error of centring to be made. The score was the amount of average error for ten trials.

(c) *Bisection of Angles.* A circular wooden base was constructed half of which was covered with white paper. On the outer edge the degrees were marked on a metal ring recording up to 180 degrees. At the centre a thin axis or pole projected. The angle exposed could be varied by a black semi-circular plate which was moved against the axis on the white surface. An angle of any number of degrees might be readily exposed by this means. A thin wire was looped about the axis and projected over the edge of the plate. The whole edge was then covered by a black ring, hinged at the back and fitting over the edges, thus masking the number of degrees, edges of plate, etc., and exposing only a true sector on white. The subject was required to manipulate the projecting wire and to bisect the angle of the exposed white sector by its means. Errors of bisection could be read to half a degree, but this was not completely satisfactory. An attachment to give a Vernier reading to tenths of a degree would probably have yielded a finer grading of results. Five attempts at angles of 60 degrees and five at 120 degrees respectively were made by each subject, the score being the average error. To make conditions uniform the errors in the division of 60 degrees were doubled and added to the errors made in bisecting the angle of 120 degrees.

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* Koh's Intelligence Measurement. New York, The Macmillan Co. 1923.

† Link, Henry C. Employment Psychology. p. 124. New York, The Macmillan Coy. 1920.

(d) *Touch.* A screw tactometer of five inches in diameter giving minute readings of differences of two adjacent surfaces was constructed. A metal core was fitted into a cylinder by means of a worm of one-tenth of an inch per revolution, the base of the inner portion was marked off into 280 parts, and the outer and upper was provided with an index pointer. If the screw was moved through one of these micrometer gradations the difference in the heights of the two surfaces was thus, 1/2800 of an inch. Half degrees could readily be noted, thus obtaining final readings in terms of 1/5600 of an inch. Even this minute adjustment could with advantage have been finer; as in the previous case, the addition of a Vernier attachment would probably have yielded better gradings. The score was taken as the average error for ten adjustments.

(e) *Strain.* The Smedley dynomometer was used. The grip was adjusted for the subject, and he was then instructed to squeeze it gradually till told to "Hold it." After one second he was told to "Release grip." The standard strain was set at 15 kilogrammes. With the apparatus again at zero the subject was next asked to repeat the former strain. The score was taken as the average error for ten trials, half kgs. being estimated..

(f) *Brightness.* A standard tube of Winsor and Newton's Lamp Black was dissolved in 250 c.cs. of water, and some of this solution was further weakened to a strength of 1:5000. Sheets of white drawing paper were treated with successive coats of this solution, varying in number from one to twelve. A graduated scale, differing widely at the base but of much closer densities at the higher end was thus obtained. Subjects were required to grade these cards in order of brightness, the score being the number and extent of displacements from the true order in three trials.

4. *Tests of motor abilities.* In all cases one preliminary practice was allowed for the purpose of "warming up" the subject and familiarising him with all the procedure.

(a) *Accuracy in Line-drawing.* The task was to draw a line with a very finely pointed pencil between a pair of printed lines on a paper without contact with the black edges. Three directions were used, viz., horizontal, perpendicular and zig-zags at forty-five degrees. Ten spaces in each direction were given, their distances varying in each case from a half-millimetre up to five m.ms. In each group spaces were numbered with the greatest as 1 to the smallest as 10, and the final score was taken as the highest total achievement in the three directions.

(b) *Steadiness.** The well-known Whipple steadiness test was used, the subject being required from an elbow rest to thrust a stylus through a series of nine holes gradually decreasing in diameter without making contact. The subject proceeded at his own rate. The holes are numbered with the largest as No. 1 and the smallest as No. 9. The score was taken as the highest average for three trials.

(c) *Tapping.*† The subject was required, with the elbow rested, to tap with a stylus upon a brass plate. The number of contacts was counted on a special electric counting apparatus. The score was taken as the average achievement for three trials of thirty seconds each.

(d) *Motor coördination, or three-hole tapping.* Three holes standing as angular points of an equilateral triangle with sides of two inches, are bored through a brass plate laid upon an insulating bed. The thrusting stylus just fits the holes and makes an electrical contact when touching a plate at the base of the bed. The contacts were counted as in the previous test. The score was taken as the highest number of contacts of three trials of thirty seconds each.

(e) *Assembling Matches.* Thirty "safety" matches are laid in standard array on the table within easy reach of the subject. The matches are at right angles to the table edge at which the subject is sitting. They are set out in three rows of ten matches each, with a space of ¾" between each match and 1" between the rows. The matches are arranged with the "head" and "clean end" up alternately. The subject is required to pick up each match in succession, starting from one corner of the array and working along each row. He had to place each match with the head showing in a half-open match box. This is held in the left hand, with the forefinger at the open end. When all the matches have been placed in the box it is shut by the pressure of the forefinger. The score given was the best time for three trials.

(f) *Circular Pursuit-meter.*‡ A plate of wood the size of a phonograph disc has a small brass disc the size of a shilling inserted half-way along one radius. Along the edge of the disc are ten alternate brass plates and ten insulated spaces, each 1/20th of the circumference of the disc in size. All the brass plates are wired to the "spot" previously mentioned. When the disc is set revolving at 60 turns per minute, 600 electrical make-and-break contacts are made with a small strip of brass acting as a brush along the edge of the plate. The circuit is completed by means of a stylus touching the bright spot on the surface.

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* Whipple Guy Montrose, Manual of Mental and Psychical Tests, p. 153 ffg. Baltimore, Warwick, and York. 1914.

† Whipple Guy Montrose. Ibid. p. 130 ffg.

‡ Koerth Wilhelmine. A Pursuit Apparatus. Psychology Monographs. Vol. I., No. 8. p. 288.

The stylus is loosely jointed about 1½" from the end, which is turned downward about ½" from the point. This stylus when touching the spot during the revolution of the plate causes the counter to record. For our work the pointer worked so very loosely that many of our subjects would have failed to score. A thin piece of rubber tubing half an inch in length was therefore stretched about the joint, and prevented too great a play of the end-piece at the joint. The score taken was the best of three trials of thirty seconds each.

The first test administered was the army alpha, which was given to groups of from six to ten subjects, accordingly as they were available, at the hours of 10 a.m. or 2 p.m. As these were the initial tests they were not so satisfactory in a few cases as the remaining tests; four of the subjects in different groups appeared to treat the first test of the alpha group less seriously than was desirable. With one exception this condition was replaced by one of earnestness for the rest of the individual series. All the other tests were given at the same hours to individual subjects, two being tested at the same time, and four subjects being worked through normally in the course of a day. The full coöperation of the subjects in all these tests seemed to be obtained. The tests were so arranged in a fixed order of procedure that no test that might cause muscular or visual fatigue followed others of the same type. Each succeeded the other in leisurely procedure with explanation and trial periods in between; yet a sufficient degree of interest seemed to be maintained throughout, so that each subject put forth his best efforts so far as the experimenters were able to judge.

The final number of complete results obtained from subjects was forty-nine, the average scores for the whole group being set out, for each test in Table I. These results should be of interest since many of the tests are standard types, while the subjects belonged to a group ostensibly selected for the abilities that these tests are designed to measure. The results for all the subjects in each test is as follows:—

TABLE I.

Averages in Tests for all Subjects.

	Av.	S.D.
Army Alpha	85.4	29.65
Koh's Block Design I.Q. ..	107.9	24.81
Link's Form Board III.	15.6	4.35
Galton Bar	6.40	3.50
Centring Circle	3.1	1.19
Bisecting Angles	1.29	.80
Tactometer	.94	.50
Strain	1.46	.69
Brightness Discrimination ..	1.9	1.27
Line Drawing	8.3	.56
Steadiness	4.4	1.34
Tapping	191.0	14.0
Three-hole Tapping	40.0	3.4

It is possible to make comparisons between our results and the data of certain of these standardised tests. With regard to the Army Alpha test the average scores would rank according to American army standards as "C plus", or as High Average, the American standard ranging from 75 to 104 points. The same is true of Koh's Block Design tests which yield an I.Q. of 107. Data for comparisons with the tests used by us for sensory discrimination are somewhat meagre; that for length, however, is close to the percentage of error to be expected according to Weber's law. For some of the tests of motor ability, however, data are somewhat less meagre. The tapping averages are about what might be expected from ordinary types, but the results of the Assembling Matches test show a decided superiority in speed over two groups of University students, numbering 36 and 43 subjects, their average scores being respectively 37.3 and 36.3 seconds. The results obtained by our subjects in the Pursuit Meter test is much below that obtained in the original research. There the University group average a score of 90 contacts for five 20 second periods, two minutes preliminary practice being allowed. Our own subjects secured an average score of only 72 contacts for 30 second periods, with, however, but a very short practice period of 30 seconds.

III.—THE GROUPS AND THEIR RATINGS.

For purposes of identification the four groups have been numbered (1), (2), (3), and (4) respectively.

Group (1).—This consisted of twenty apprentices engaged in shop tasks of a miscellaneous character and of varying grades of difficulty. Since they consisted of the newest comers to the shop their length of service was inconsiderable, averaging only 7 months.

Group (2).—This, numbering 12 subjects, was employed on brass lathe work. Such a task would appear to require a certain degree of technical skill rather than intelligence. The average length of service for this group was approximately 2 years. *Group* (3).— Apprentices composing this section numbered 7 subjects in all, and were engaged in "tool room fitting." The work, according to test results, is not one requiring high intelligence; but the management insist that this group is a highly skilled and intelligent one. The results of the significant tests show, however, that the average obtained by this group in Army Alpha (Table 2) is below that of the first group. This discrediting of the intelligence factor in this group, which is also borne out in general b the judgment of a principal of a Technical training school* in England is, it is only fair to state, challenged by the managerial heads, who contend that, in their opinion, this type of work calls for a high degree of intelligence. In such a dispute the only appeal would be to further practical results of applications of intelligence tests to toolroom fitters. So far as the writers are aware, none such are available.

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* Tagg Mac. "The Make of the Engineering Worker," Journal Inst: Indust: Psychology, Vol. I., No. 8. , 1923.

Group (4).—The work of this group of apprentices, 10 in number, is listed under the heading "millwrights." It consists of construction and fitting up of various pieces of machinery. As appears in Table 2, this group was by far the most efficient, and obtained the highest rankings of any group in a majority of the tests. The length of service for subjects in this group averaged 2 years and 4 months.

Achievements of Each Group.— In addition to the Avs. and S.D's. for all the tests, the averages of the significant tests were taken for each group separately. They are summarised below in Table II., along with the General Average obtained for all groups, included for the sake of comparison.

TABLE II.

Group Averages for Significant Tests.

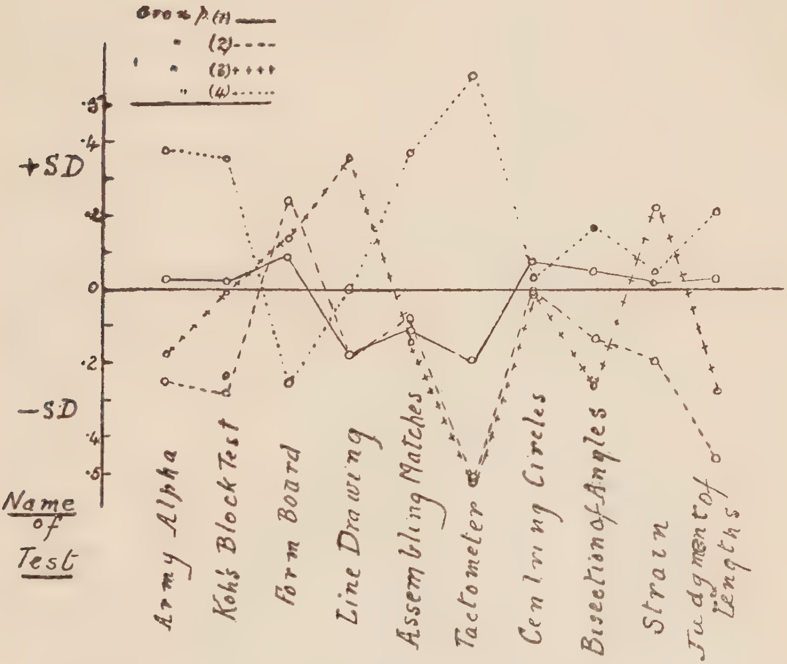
		Groups			
	Gen. Av.	I.	II.	III.	IV.
Length of Service	—	.58yrs	2.03	2.3	4.41yrs.
Army Alpha Test ..	85.4	86.5	77.8	79.6	96.7
Koh's Block Test	107.9	108.4	101	105.7	116.8
Link's Form Board ..	15.6	15.2	14.5	16.2	17.1
Line Drawing	8.3	8.2	8.2	8.5	8.3
Assembling Matches ..	33.6	34.1	34.0	34.3	31.9
Touch	.94	.95	1.10	1.10	.65
Centring Circle	3.1	2.98	3.1	3.1	2.95
Bisecting Angle	1.29	1.25	1.4	1.5	1.15
Strain	1.46	1.45	1.6	1.3	1.42
Lengths	6.4	6.3	8.0	6.5	4.5

A comparison of the test results according to the average score for these groups shows that Group (1) has a higher general achievement in most of the tests over Groups (2) and (3). Group (4) shows on the whole the highest general achievement. If the tests were, however, capable of being influenced by general practice, then Groups (2) and (3) should show a considerable advance over Group (1); but this is not the case. The only conclusion that may be arrived at from the data available appears to be that practice of a general kind does not affect the results of such specific psychological tests. This deduction is in line with the contention of Thorndike and others concerning the effects of general habit and practice upon specific tests, though such a psychologist as Claparède is opposed to it.

The results of the averages of each group are shown in the graph below. The data was obtained by reducing the difference of the average of each group from the general average into terms of the general Standard Deviation, according to the formula:

$$\frac{\text{Gen'. Av. — Group Av.}}{\text{S.D. of General Av.}} = \begin{array}{l}\text{Position of Group in}\\ \text{terms of + or — S.D.}\end{array}$$

(Graph showing deviations of Averages of each Group from the General Averages).



The work of grading the various groups according to ability was carried out by the foreman and two sub-foremen of each group. Except for the formulation of the written instructions and a general description of the method to be employed, this phase of the work was carried out by the workshop heads themselves. The name of each individual in the group was typed on uniform slips of paper and then arranged in alphabetical order accompanied by written instructions. These instructions required an estimate of their skill, of the general capacity of the subjects in regard to their output, of workmanship and of ability to follow and interpret instructions and plans, "without reference to considerations of character and behaviour." The judgments showed a high degree of consistency in the case of two groups, viz., (1) and (3). In the case of Group (4) it was impossible to assess the subjects on this basis since no one foreman could estimate all the cases. The results were therefore arrived at from a consideration of the rankings supplied to the investigators. In the case of Group (2) the ranking was not so consistent as in the cases of (1) and (3), as appears from the Table which shows the Correlations of Rating of all but Group (4):—

TABLE IV.

Group		Judges					
		I. & II.	I. & III.	II. & III.	I. & Av.	II. & Av.	III. & Av.
(1)	..	.93	.92	.88	.98	.96	.94
(2)	..	.89	.89	.74	.94	.94	.85
(3)	..	.93	.96	.94	1.00	.93	.96

IV. CORRELATION RESULTS.

General.— Not only did the nature of the groups differ, but the actual workshop tasks within each group differed as between individuals. This might actually influence some of the foremen's judgments since there is a possibility that certain individuals would find themselves well adjusted to simple types of work, whereas others of higher capacity employed on more difficult tasks may have given less satisfaction. Again, temperamental differences would tend to affect the ranking of the foremen, since of two individuals equal in capacity the more obliging and eager type would be rated higher than the other whose traits in this respect were less pronounced. On the whole, however, the test ratings showed a fair degree of correlation with the foremen's rankings. The usual Pearson rank formula was used throughout. The working out of a very large number of correlations was necessary, for not only had the tests to be correlated with the foremen's average, but also inter-collerated with one another. Finally the results of each collection of significant tests were combined and averaged, and from these was obtained the final order for correlation with the foremen's rankings.

Group (1). The results of the correlations of significant tests are shown in Table V. The results of the final arrangements of the combined tests yielded a correlation of .70 with foremen's ranking for this group. Two individual cases showed marked divergence in the tests from the foremen's rating. If, however, the lowest 25% of individuals were excluded on either ranking, then only one of these individuals would be ruled out by the tests. Other members of the group showed close agreement between test results and foremen's ratings.

TABLE V.

Correlations of Significant Tests and Foremen's Ranking for Group (1)

	Strain	Touch	Angles	Circles	A. Alpha	Av. Test Ranking
Foremen's Ranking ..	.36	.60	.55	.70	.41	.70
Test Average ..	.46	.62	.63	.86	.66	
Army Alpha	.12	.02	.46	.38		
Centring Circles ..	.32	.65	.42			
Angle Bisection ..	.22	.04				
Touch Discrimination	.18					

Group (2). Apparently the work demanded of this group was not one requiring great intelligence or even keen sensory judgment. The significant tests are those of motor skill, coördination and dexterity above all other traits, and comprise Three-hole Tapping and Assembling Matches, while the Koh's Block test indicates an application of practical intelligence in a moderate degree in place of general intelligence. The final correlation of combined average ranking in the tests yielded a result of .74 with foremen's ranking. The results of the correlations are shown in Table VI. One subject marked by his sub-foreman as seventh, was given a similar position according to the tests. The rankings of the other foremen placed him first. In none of the tests did this subject rank above low average. This disagreement considerably reduced the correlation which was, however, fairly high.

TABLE VI.

Correlations of Significant Tests and Foremen's Ranking for Group (2)

	Koh's Block Test	Assembling Matches	Three-hole Tapping	Av. Test Ranking
Foremen's Ranking ..	.24	.29	.36	.74
Av. Test Ranking ..	.47	.20	.30	
Three-hole Tapping ..	-.07	-.38		
Assembling Matches ..	.02			

Group (3). Consisting of seven apprentices the results of this group gave an almost perfect final correlation of .96. Intelligence appears not to be an important factor in tool-room fitting, but sensory judgments and strain, with a certain motor-coördination implied in the Assembling Matches are the required traits. The results are shown in Table VII.

TABLE VII.

Correlations of Significant Tests and Foremen's Ranking for Group (3)

	Assembling Matches	Strain	Galton Bar Lengths	Av. Test Ranking
Foremen's Ranking ..	.73	.75	.66	.96
Av. Test Ranking ..	.75	.64	.80	
Galton Bar—Lengths ..	.38	.40		
Strain	.52			

Group (4). This group showed a higher degree of intelligence of both types than any other group, but this fact did not appear to be a significant differentiating factor in the tests. Possibly the differences were too small to affect the correlations. Again, the lack of possibility of complete ranking by every judge gave too coarse a grouping for the small differences in intelligence to affect it. Three tests gave high correlation with the grouping, but their intercorrelations were so high as to lead to the conclusion that they were all measuring the same trait. Since they confirm the findings of other groups they are each given in the table below. Their combined ranking actually reduces the correlation rather than increases it. It would therefore be best to take the centring of Circles as the most significant test for this group.

TABLE VIII.

Correlations of Significant Tests and Foremen's Ranking for Group (4)

	Accuracy (Line-Drawing)	Lengths (Galton Bar)	Centring Circles	Av. Test Ranking
Foremen's Ranking ..	.70	.66	.71	.66
Av. Test Ranking ..	.90	.95	.93	
Centring Circles ..	.81	.79		
Lengths—Galton Bar ..	.85			

V.—CONCLUSIONS.

In considering final values of the tests the first factor to be borne in mind is that they should be diagnostic of all phases of shop work, since apprentices are required to familiarise themselves with all aspects. Not only the tests that proved themselves of value in the first group are of importance, but the tests that proved diagnostic in every other group as well. Some of the significant tests indeed are found to be included in more than one group, e.g., Centring Circles and Bisection of Lengths, etc. One factor, that of intelligence, appears to be of small value in diagnosis according to these results, but it is to be borne in mind that these apprentices were originally selected on a written examination in the "three R's". This would tend to confine the factor of intelligence to small differences, since the lower types would be excluded by failure in the written examination while the higher end of the curve would hardly be represented in this occupation; the main requisite for this type of work would therefore appear to be motor skill and sensory discrimination rather than intelligence. At the same time, in the case of original selection of subjects for apprenticeship, it would be necessary to exclude individuals who fall too far below the average score of the group.

In the following table the results of the various significant tests correlated with the corresponding foremen's ranking are shown. Those which are shown bracketed had to be excluded on account of high intercorrelations; but as in many cases they tended to confirm the values obtained in other cases they are also included in the table.

TABLE IX.

Correlations of Diagnostic Tests for each Group with Foremen's Rankings.

Name of Test	Group (1)	Group (2)	Group (3)	Group (4)
Army Alpha	.41	(.24)	—	—
Koh's Block Test ..	—	.23	—	—
Link's Form Board ..	—	—	—	—
Judgment of Lengths .	—	—	.66	(.66)
Centring Circles ..	.70	—	—	.71
Bisection of Angles ..	.55	—	—	—
Tactometer	(.60)	—	—	—
Judgment of Strain ..	(.36)	—	.75	—
Accuracy—Line-drawing	—	—	(.66)	(.70)
Three-hole Tapping ..	—	.36	—	—
Assembling Matches .	—	.29	.73	—
Pursuit Meter ..	—	—	—	—
Grading Greys ..	—	—	—	—

V.—SUMMARY OF CONCLUSIONS.

1. In comparison with the practical rankings of the foremen who knew the subjects well, certain tests seem to be of specific value in estimating ability among apprentices in engineering workshops of the kind indicated in this research. If applied beforehand they would thus be of direct diagnostic value in selecting subjects for this vocation.

2. The various representative traits demanded appear to be: (a) Intelligence, (b) motor skill, (c) dexterity and coördination both general and practical, and (d) keen powers of sensory discrimination in regard to spatial forms and kinaesthesia, and care in making the necessary adjustments.

3. The various representative tests, the majority of which—all except three—might be administered as group tests are as follows:—(a) A test of General Intelligence. (b) A test of Practical Intelligence. (c) Motor tests, e.g., Three-hole Tapping, Assembling Matches. (d) Sensory Judgments, e.g., Judgments of Lengths, Bisection of Angles, and Judgment of Strain.

REVIEWS.

STUDIES IN CONTEMPORARY EDUCATION. By A. Mackie and P. Cole. Sydney Teachers' College Press, and Angus and Robertson. Pp. 153. Sydney, 1924.

Like the latest book by Professor Adams this work seeks to make its readers acquainted with the latest developments in educational thought and practice. It affords striking evidence of the strides education is making and of the manner in which Australian workers are keeping abreast of this advance.

Professor Mackie, who divides his half into Studies in Educational Theory, and Studies in Experimental Education, rightly begins with a consideration of the work of the educator. While Pestalozzi and his followers would use Development, and Spencer would use Complete Living, Professor Mackie favours the Elements of Welfare to express his aim. His analysis bears a close resemblance to that of Spencer, but he gives a new treatment to the elements, a new emphasis to Social Feeling, and a new value to Leisure.

"The mark of a civilised man is the use he makes of leisure." Is it not also true that the mark of a civilised State is the amount of leisure which all of its members enjoy? True is it likewise that our notions of leisure are traditional and do not contemplate the working classes enjoying it. Professor Mackie shows how far the school can go to meet the new demands. Psycho-Analysis is of value to the teacher, but he does not consider that every teacher is capable of becoming a psycho-analyst.

The studies in Experimental Education form the most important part of the work. Here are the answers to the questions which the practical teacher brings forward:—Why do we need tests other than school tests? How can school tests be standardised? What are the so-called Tests of Intelligence, and what exactly do they test? Here are also some of the problems connected with these tests. Professor Mackie is strong on three points: (1) We need a set of tests standardised for Australian children; (2) The workers in this field should be co-ordinated; (3) There should be a school or schools for research in each State.

In the first section of his half, Dr. Cole discusses the steps of procedure which a class teacher should follow. Illustrations are given from Geography and from History. All this is suggestive, and suggestive too is the discussion on the place of reason in teaching history.

In his second section, Dr. Cole gives glimpses into institutions, conditions, and advances in other lands in which Australia lags behind. Many readers will wish he had given more than glimpses. Toronto, with a population of 500,000, spends £1,800,000, Boston with 1,000,000, spends £3,000,000, New York, with 6,000,000 spends over £20,000,000, on education yearly. But then Toronto now has full-time education for all pupils up to 16 years of age, and continuation education for all between 16 and 18, and New York has compulsory day continuation classes for all boys between 14 and 17. We should like to know the amount spent on the extra education beyond 14, and the amount spent on buildings, and on salaries. There are glimpses into an American City school system, the size of classes, certain salaries; but glimpses only. There are other glimpses into the Training of Teachers in Scotland, Vacation Playgrounds in Winnipeg, the great Lincoln School in New York, the working of the Dalton Plan. If Dr. Cole's aim was to whet the appetite of his readers, he has certainly succeeded.

—John Smyth.

INTRODUCTION TO MODERN PHILOSOPHY. By C. E. M. Joad. Oxford University Press. 1924. Pp. 112. Illustrated. 2/6.

This little book is the first of a series of introductory volumes, written so as to appeal both to the specialist and the general reader. Mr. Joad divides his work into five chapters, on Modern Realism, Russell, Croce and Gentile, Pragmatism, and Bergson. Each contains a clear and closely reasoned statement of the philosophic creed in question, followed by a brief criticism. The writer plainly regards Realism as of chief interest among current tendencies, and though critical of the views he discusses, he is in the main sympathetic to this one. It is, therefore, remarkable that he devotes no space whatever to Alexander, whom most Oxford philosophers (and Mr. Joad hails from Balliol) regard as the leading Realist. The reason is that Alexander has moved beyond the point where epistemological quarrels about the status of sense-percepts seem of the first importance, while Mr. Joad's manner of approach shows that he takes this issue to be fundamental. He, like the American authors of "The New Realism," is still prepared to meet Hegel with the general type of argument that would suffice to demolish Berkeley.

This is symptomatic of a neglect of Absolute Idealism shown by the whole book. It is concerned only with developments subsequent to the publication of "Appearance and Reality," and we are left to conclude that the school represented by that work has since produced nothing of importance—that, for instance, its critical rejoinders to Realism, Pragmatism, and the Philosophy of Change are negligible. It may be true that they are, philosophically. But historically they are not, and since Mr. Joad's *role* is primarily the chronicler's, his omission is misleading.

He ignores, too, the modern re-interpretations of Kant. Kemp-Smith is not mentioned and the chapter on Pragmatism contains no reference to Vaihinger. Mr. Joad seems hypnotised by that word "modern." He mentions Hegel, because Hegel was a butt for realists and pragmatists. But he attempts no sort of explanation of the historical roots of contemporary speculation, and he omits also the interesting question of its national or cultural origins. All this makes his book seem more a series of separate essays on selected "systems" than an Introduction to Modern Philosophy, and in the space of a hundred pages he cannot treat these with any depth. One passage is sympto-

matic of his attitude. After referring to the issue between Hegel and Croce, he says, "For those who do not accept the presuppositions of Idealism the points at issue will seem abstract and meaningless enough. It is important, therefore, that the reader should make up his mind at the outset on the merits of the controversy between Realists and Idealists, before deciding in favour of one or another of the various branches of Idealism offered by Modern Philosophy." Note the implications. "Philosophy" means a number of mutually unrelated theories of reality, presented to the plain man for his choice. Choose one, you reject and can ignore others. It may be that the attitude of the party politician befits the student of philosophy. And again, it may not. It seems a pity that Mr. Joad, interpreting the thought of this age to the layman, should have assumed the point and written his "Introduction" accordingly.

—S. C. Lazarus.

IMMORTALITY.—A series of nine essays by different writers, edited by Sir James Marchant, LL.D., with an introduction by Lord Ernle. G. P. Putnam's Sons, London and New York. Pp. xii + 194. April, 1924. Price 7/6. (Our copy from Angus and Robertson).

Here are nine independent views of a mystery and a problem which has challenged the mind of man for thousands of years. First come four sketches of ancient conceptions of immortality, or rather groups of conceptions, for in the life and thought of each of the four peoples there is a conflict or a blending of different instincts and ideas, a succession or a fusion of conceptions rather than an evolution of one clear conception. Sir Flinders Petrie writes on Egyptian conceptions of immortality; Mr. Cornford of Cambridge on Greek views; Prof. Macdonell, of Oxford, on immortality in Indian thought; and Prof. Welch, of Edinburgh, on Hebrew and Apocalyptic conceptions. Roman thought is not represented in this survey, except for an incidental glimpse in a survey of the world's poets. The law and order of this world's life were Rome's peculiar occupation and achievement. Its religion was a consecration of the secular rather than a contemplation of the eternal. When it woke to the problem of the future life, it turned to Greek philosophy and Oriental mysticism for an answer to its questions.

The central place in the series is given to the Christian idea of immortality, which is unfolded in its basis, its contents and its implications, in an amazingly satisfactory manner for an essay of twenty pages, by our own Prof. McIntyre, of Sydney. Then follow four studies of the problem from the various points of view of modern thought. Dr. Galloway, of St. Andrews, analyses the philosophical grounds of the belief; Dr. Eucken, of Jena, its ethical basis; Canon Barnes, of Westminster, D.Sc. and F.R.S., now Bishop of Birmingham, in the most masterly essay of the series, deals with the general question of science and immortality; and Maurice Hewlett, novelist and literary critic, in a breathless flight from Homer to Dante, and from Shakespeare to Tennyson, traces the idea of immortality in the poets.

The Christian idea comes in its right place in the series. It is the climax and the crown of old-world faiths and philosophies—the answer to their questionings, the confirmation of their guesses, the sublimation of their ideas. In contrast to their kaleidoscopic syncretism it has a convincing unity of its own. There is a promise of that unity already in the evolution of the Hebrew idea of immortality. Lord Ernle remarks in his preface that "the belief in immortality rests ultimately on the truth of the belief in the government of the Universe by one supreme, moral and spiritual Being." That remark needs one important addition—"and in the conscious relation of the soul of man to that Being." It would then serve as an admirable summary of the history of the Hebrew faith in the future life. The Christian idea goes far beyond, but along the same line. That idea is based not merely on the teaching of Christ, but on the union of the Christian with Christ, in one mystical Body. Immortality thus becomes a fellowship as well as a life, a social as well as a spiritual destiny. The New Testament leaves some questions still open, e.g., the question of "conditional" or more accurately "potential" immortality, on which Prof. Macintyre offers some arguments that are arresting, even if not conclusive. On this and other questions we reach the margin of mystery into which all revelation shades off. Dr. Storr in his "Christianity and Immortality" speaks wisely of the "magnificently strong" reserve of Christianity about just those very points "where," he quotes Dr. Salmond, "the conjectures of men have been least restrained and of smallest profit for the practical conduct of life." The position of the essay on the Christian idea of immortality is not only historically, but also logically right. The name of Christ is rarely mentioned in the philosophical, ethical, scientific and poetical studies which follow. By a fine self-restraint the last four essayists keep strictly to their subject. But it is impossible to read their essays without feeling that the particular idea of human personality which is the keynote of their treatment of the subject is the result of centuries of Christian thought.

These essays are all inevitably and deliberately condensations which it would be difficult and perhaps unfair to discuss in detail, even if space permitted. It must suffice here to say that taken together they are an extraordinarily valuable survey of the history and the grounds and contents of the belief in immortality. Lord Ernle, in whom we scarcely recognise at first our old friend, R. E. Prothero, the author of "The Psalms in Human Life," says in his preface that "the prevalence and persistence of the belief are striking facts in the mental history of mankind," but "nothing more." Our Australian "Bulletin" in one of its deeper moments has spoken highly of these essays, but only to close on a wistfully faint note: "So it ends that we come out by the door we went in, our doubts not dissipated, the veil not lifted, but still perhaps clinging to the larger hope." Lord Ernle himself, despite the judgment just quoted, sees something more of relief for doubt in these essays. "No cogent proof can be offered either of the truth or of the falsity of the hope in immortality. But the central point on which the essays converge is that it is not only a possible truth, but the object of a reasonable faith such as that on which men act in all practical affairs, and the most adequate interpretation of the ethical and spiritual values of the life of mankind." That central point stands out clearest perhaps in Canon Barnes' essay. Resolutely putting aside for his task's sake the Christian faith that he holds and teaches, he works out step by step the ultimate implications of a rational world such as all science must postulate or recognise; and he finds at work in that world a creative process which with the entry of human personality stands revealed as "the product of a Divine Mind working towards definite ends, bringing into existence beings who can begin to think His thoughts and understand His values." In those thoughts and values, objective, spiritual, eternal, lies the proof and pledge of the immortality of the human spirit that finds itself in recognising their reality.

—Lewis B. Radford (Bishop of Goulburn).

THEORIES OF MEMORY. By Beatrice Edgell, M.A., Ph.D. Clarendon Press, 1924. Pp. 169. Price 7/6.

"To try and hit an object with a vague thought is like trying to hit the bull's eye with a lump of putty," says Bertrand Russell. From this charge it is to be feared a fairly large number of so-called "psychologists" at the present day can hardly be exonerated! Terms such as "memory" and "imagination," taken over from every-day and applied to certain psychic functions and processes, are, not infrequently, regarded as of self-evident meaning, requiring little or no analysis. Upon this uncritical basis are built up theories (in regard, for instance, to the nature of the so-called "unconscious,") which as factual descriptions or even as conceptual hypotheses are certainly little more than theoretical "lumps of putty." But amid the outpouring of such vague theorisings, the last decade has seen a growing stream of more carefully critical thought. The process of clarifying psychological thought should be helped considerably, along one line and that one of central importance, by the publication of Miss Beatrice Edgell's little book, "Theories of Memory." For the most part it consists of a critical exposition of the theories of others, writers influenced by biological conceptions, and certain modern philosophers ranging from Hobbes to Bergson.

Perhaps the most interesting chapter in the book is that which deals with the conception of memory in the philosophy of M. Bergson, and compares it with that of Samuel Butler. The final section is "the writer's attempt to work out the memory problem from the standpoint of a psychology wherein the conceptions of process, function, structure, growth, decay, organisation, and development have their place," and of that problem the central issue is, perhaps, that of the nature of the memory-image.

Negatively, Miss Edgell maintains that "the memory-image is not 'given' as a sense-impression is given, and it is not the persisting vestige of the sense-impression." The possibility of a right conception of the nature of the memory-image hangs upon the recognition of "a persistence and continuity of function which belongs *only* to cognitive processes, and belongs only to these in virtue of the relations into which they have been brought by conative effort." "When conation has linked sense-perception with sense-perception in the fulfilment of its endeavour, when they have entered as parts into the furtherance or frustration of striving, and thereby have come into organic connexion with one another, the occurrence of one sense-perception will require the other as its complement. If the one be "given," in the sense that the function of perceiving is sustained by sense-impressions, the unity of the whole will occasion the cognition of the others, and that cognition will be sustained by imagery . . . . The imagery does the work of sense-impressions, and is an event in mental life just as a sense impression is an event." Following upon the position adopted, Miss Edgell examines the questions of knowledge of the past and introspection, belief, trains of ideas, and the unconscious.

While one may not feel that the problem of memory in its various aspects is brought appreciably nearer satisfactory solution, in all cases the treatment is interesting and suggestive, and Miss Edgell herself is far from claiming any finality for the positions adopted. Her essay, as she says, "only purports to be a discussion of theories." But as such it must indeed make for a more critical analysis of psychological conceptions, of which "Memory" is certainly one of the most important, and for the replacement, by something more appropriate, of some of our many theoretical "lumps of putty."

—D. M. Rivett.

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Contains lectures by Sir A. Lowes-Dickinson, C. Delisle Burns, Sir Henry Fowler, C. H. Northcott, L. P. Jacks and others.

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No. 6, Feb. 7, 1925, contains an article, "Observations (Mainly Psychological) on the Concept of Mental Deficiency," by E. Morris Millar, M.A., Litt.D.

THE LEGAL JOURNAL. Sydney, N.S.W. Published monthly. 10/6 per annum.